An investigation into the provision of built environment education to schools in London, the South East and Yorkshire and the Humber

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Executive summary

Introduction

- The report was commissioned by the Department for Culture Media and Sport (DCMS) to provide information on organisations providing education focusing on the built environment in three regions (London, the South East and Yorkshire and the Humber). The findings from this study will be used to inform *Engaging Places*, a project from DCMS, in partnership with English Heritage, the Commission for Architecture and the Built Environment (CABE), and (later in 2007) the Academy for Sustainable Communities (ASC). *Engaging Places* hopes to inspire schools to engage more widely with local buildings, places and spaces; the project aims to do this by developing a network and communications plan which can harness and support the delivery of built environment education services to schools.

- The built environment '*includes buildings of all ages and types, the spaces in between them, and their relationship with the natural environment and the local community*' (2005, Hamer and Waterfield). Education focusing on the built environment can have a considerably broad remit, ranging from pupil involvement in designing and building their schools, and projects focusing on the relationship between people and places, to pupils exploring their own communities and local built environments, and linking religions and places.

- This report constitutes the initial phase of the Engaging Places research project (the next phase of the research will explore provision and perceptions of the built environment from the perspective of schools). The research develops a number of speculative issues that will be tested and discussed through subsequent research and the project's regional advisory group discussions. As this report constitutes a component of the Engaging Places research process, this report remains in draft until the pilot project is completed and the conclusive findings are presented to Ministers in Autumn 2007.

Type of organisation and geographical remit

- To ensure that the telephone survey captured the views of a range of stakeholders operating in the built environment sector, interviews were conducted with three types of respondent: direct providers of built environment education; personnel who could offer a policy, strategy or managerial perspective; and LA advisors who had insights into this area. A total of 93 interviews were conducted during the telephone survey.

- The majority of interviews were conducted with built environment education providers (44) and policy, strategy or managerial personnel (43). A small (six) number of interviews were conducted with local authority advisors, reflecting the challenge of identifying relevant individuals to speak to with a specialism in this area.

- The built environment education providers included in the survey were predominantly from London (18) and Yorkshire and the Humber (15). Eight of the providers were from the South East, whilst a minority (3) were

deemed national providers (these were: Canterbury Cathedral; National Monuments Record; and CAPE UK). The vast majority of policy/strategy/managerial interviewees represented national organisations, thus demonstrating the organisational 'overview' that these interviewees had. Table 1 provides further detail.

Table 1 Type of interviewee by region (number of respondents)

Regional location	Provider	Policy/strategy/ manager	Local authority advisor
	(N)	(N)	(N)
London	18	0	2
South East	8	1	3
Yorkshire and the Humber	15	7	1
National	3	35	-
Total	**44**	**43**	**6**

Source: NFER interviews September 2006-January 2007

- Providers spoken to in London were predominantly based in inner London boroughs. Those spoken to in the South East and Yorkshire and the Humber were roughly spread across these regions.

- The DCMS provided a categorisation of each organisation according to the sector in which they operated (i.e. built environment, arts, historic environment etc.). Table 2 shows that organisations included in the telephone survey were predominantly from the historic environment and built environment sectors. This was the case for both providers and policy, strategy or managerial personnel.

Table 2 Type of interviewee by sector (number of respondents)

Sector	Overall	Provider	Policy/strategy/ manager
	(N)	(N)	(N)
Historic environment	27	13	14
Built environment	24	15	9
Museums and galleries	12	9	3
Non-departmental public bodies	5	1	4
Arts	4	3	1
Subject association	4	0	4
Education	3	2	1
Government	3	0	3
Regional development agency	2	0	2
Virtual resources	1	1	0
Lottery provider	1	0	1
Enterprise	1	0	1
Total	**87**	**44**	**43**

Source: NFER interviews September 2006-January 2007

- Table 3 provides details of the local authorities included in the survey and the job title of the representative interviewed.

Table 3 Type of local authority and role of local authority advisor

Region	Name of local authority	Role of local authority advisor
London	Camden Borough Council	Camden Young Archaeologists Programme Coordinator
	Newham Borough Council	Arts Advisor
South East	New Forest District Council	Environmental Design Manager
	Kent County Council	History Advisor
	Hampshire County Council	Trailblazer Project Manager and the Deputy Head of Learning, Access and Interpretation Team for the Museums and Archives Service
Yorkshire and the Humber	East Riding Borough Council	Teaching and Learning Consultant for the Creative Arts

- In the main, providers stated that they served either a regional (16) or national (15) audience (both accounting for a third each). This perhaps signifies the tendency for built environment education providers to view their remit as beyond the local area.

Table 4 Geographical remit of organisations (number of respondents)

Geographical remit	Provider
	(N)
National	15
Regional	16
Local	8
Other	5
Total	**44**

Source: NFER interviews September 2006–January 2007

Types of built environment education provided

- Interviewees were asked to provide details of built environment education-focused projects that their organisation was either currently involved with, or that were available within the local authority. Table 5 provides an overview of the responses from providers and those policy/strategy/managerial personnel involved in direct delivery of built environment education activities (31 out of 43).

Table 5 Types of built environment education (number of respondents)

Types of education	Provider	Policy/strategy/ manager
	(N = 44)	(N = 31)
Site visits/experiences	39	19
Networks	39	26
Printed resources	37	22
Professional development for teachers	36	21
Projects with schools or colleges	35	24
Virtual/web-based resources	26	22
Campaigns	24	21
Maps showing location of different resources	18	-
Other	16	11

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006–January 2007

- The top five built environment education activities undertaken by organisations were: site visits and experiences; involvement in partnerships or networks; the production of printed resources; the provision of professional development for teachers; and projects with schools/colleges.

- Interviewees most commonly described the role of appointed education officers or teams and the adoption of a specific education programme in developing their built environment education activities. Many mentioned that this also involved discussions with other built environment education providers and consultation with key stakeholders (i.e. teachers and young people).

- Just over two-fifths of providers stated that the local authority had provided advice during the design of built environment activities, resources and network opportunities. Providers mainly cited individual local authority advisors, who had either an interest or specialism, as being the means through which they had received this advice and support.

Partnerships and networks

- The vast majority of respondents indicated that their organisation or local authority was involved in partnerships and/or networks with other built environment-related organisations (as shown in Table 6).

Table 6 Partnerships/networks

Partnerships/networks	Provider	Policy/strategy/ manager	Local authority advisor
	(N)	(N)	(N)
Yes	40	39	6
No	3	1	0
Don't know	0	0	0
Other	0	2	0
No response	1	1	0
Total	**44**	**43**	**6**

Source: NFER interviews September 2006-January 2007

- The types of partnerships organisations had developed or participated in varied quite substantially. Collectively, interviewees cited over 100 different organisations with which partnerships had been forged.

- Local, regional, national and international (such as PLAYCE) organisations were cited and ranged from RIBA, to Sheffield Industrial Museums Trust, to local Tourism alliances. Table 7 provides details of the most commonly mentioned organisations with which interviewees stated their own organisation was in partnership.

Table 7 Partnership organisations (number of respondents)

Organisation	Number reporting partnerships with other organisations (N = 85)
CABE	15
Local authorities	14
Schools and teachers	10
Architecture Centre Network	9
Museums Libraries and Archives (National and regional)	7
Heritage Education Group	7
Universities	7
English Heritage	8
DfES and DCMS	6
National Trust	5
Historic Houses Association	5
Churches Conservation Trust	5

This was an open response question
Source: NFER interviews September 2006-January 2007

- There were no clear differences between the partnerships developed across the three pilot regions. However, partnerships were typically forged between other organisations working in the same or similar sector.

- Most interviewees indicated that the partnerships/networks they were involved in operated on a range of levels. This varied from formal meetings and representation on steering groups, through to newsletter contact, email and website correspondence and informal discussions. However, many interviewees also felt that there was a need to further formalise these relationships and develop more established partnerships. *Engaging Places* was considered to be one way in which this could be achieved.

Young people worked with

- Most providers worked across key stages 1 to 5 and did not tend to work solely with one particular age group (see Table 8). The Foundation stage was the age group least likely to be involved in built environment education, although this was still nominated by just under half of providers as being a group they had previously worked with.

Table 8 Age range of pupils built environment education providers worked with (number of respondents)

Age range	Provider (N = 44)
Foundation	22
Key stage 1	36
Key stage 2	40
Key stage 3	40
Key stage 4	40
Key stage 5	36

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

- Those who additionally indicated that they worked with specific groups of children and young people most commonly mentioned: disengaged/disaffected young people; black and minority ethnic groups; young people with learning difficulties and disabilities; and gifted and talented children.

Curriculum links

- Built environment projects, activities and experiences were linked to a range of curriculum areas which included traditional subjects, vocational skills and informal learning (such as out of school hours and family learning). However, many interviewees stressed that they considered their work to have cross-curricular applications. Table 9 provides the detail.

Table 9 Curriculum subjects to which built environment education projects linked

Curriculum subjects	Provider (N=44)
Art and design	36
Geography	33
History	32
Citizenship	31
Science	30
Design and technology	27
English	27
Mathematics	23
Religious education	18
Information and communication technology	17
Personal, social and health education	15
Other	13
Physical education	7
Modern foreign languages	4

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

- The most frequently identified curriculum subjects to which built environment education was linked were those traditionally likely to include education of this nature (i.e. art and design, geography and history). However, the prevalence of built environment education projects that linked to the citizenship curriculum further demonstrates its cross-curricular benefits.

- Modern foreign languages (4) and physical education (7) were the least common curriculum areas to which built environment education providers specified that their projects, activities or experiences were linked.

- Activities related to vocational and non-formal learning (i.e. family and out-of-school hours learning) were each cited by approximately half of built environment education providers as being areas to which their projects linked. Specifically: vocational learning (24 interviewees); family learning (24 interviewees); and out of school hours learning (21 interviewees).

- The main types of vocational learning to which activities were linked were: the construction industry (including work experience, BTEC training); and leisure/travel and tourism GNVQs and NVQs. Individual interviewees also noted other examples of vocational learning. These included: young enterprise education; skills based sculpture courses; and craft training skills and education.

Length of education sessions and projects offered

- Projects varied in length but the most common type identified by interviewees were for short periods of time (i.e. sessional activities). See Table 10 for details.

Table 10 Length of time a typical built environment education project lasted for (number of respondents)

Length of time	Provider (N =44)
Long-term (six months or more)	16
Medium-term (more than a week but less than six months)	12
Short-term (a week or less)	11
Daily	12
Sessional (a few hours but less than a day)	18
Variable depending on type of activity	16
Other	1

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

- However, nearly as many interviewees who stated that they were involved in sessional activities also indicated that they were involved in long-term projects of six months or more. Interviewees highlighted the benefits associated with longer-term projects in developing students' knowledge of the built environment.

Funding sources

- Interviewees directly involved in providing built environment education were asked how they funded such activities. Organisations received funding from a combination of national, regional and local funders. This was common across regions and also sectors. Organisations cited national funding most frequently, with approximately three-quarters detailing national funding sources such as DCMS and the Arts Council.

- Approximately a third of organisations stated that schools paid for their services, ranging from £2.00 to £4.00 per head. A high proportion of these organisations were from the historic environment sector (for example, cathedrals and historical sites).

Take-up by schools

- Respondents most commonly stated that the current take-up or level of interest from schools in built environment education was 'too variable to comment' or they were unable to comment on levels of take-up (See Table 11). Future research aimed at exploring the views of teachers on built environment education, planned in 2007, will address this issue more thoroughly and is likely to produce clearer findings.

Table 11 The current take-up/level of interest from schools in built environment education

Current take-up/ level of interest	Provider	Policy/strategy/ manager	Local authority advisor
	(N)	(N)	(N)
Very poor	0	1	0
Poor	3	6	1
OK	6	2	1
Good	8	7	0
Very good	10	3	1
Too variable to comment	10	10	0
Don't know	5	10	3
No response	2	4	0
Total	**44**	**43**	**6**

Source: NFER interviews September 2006-January 2007

- When interviewees did provide a rating they were generally positive about take-up and levels of interest. Reasons given to support this positive outlook included:
  - evidence of good take-up and levels of interest from schools
  - increases in the provision of built environment education
  - benefits derived from topical initiatives such as the Learning Outside the Classroom Manifesto (LOtC) and Building Schools for the Future.
- A minority of interviewees (although more than a tenth) indicated that they thought the current take-up/level of interest from schools was poor. The two main reasons given by interviewees for their negative ratings were:
  - variation in the take-up and level of interest from schools
  - lack of teacher understanding and confidence in built environment education.
- Interestingly, although health and safety issues related to taking students outside of the classroom were raised by some interviewees, they were not highlighted as a significant barrier to schools engaging with built environment education. In addition, issues surrounding transport costs and rural locations of schools did not emerge as significant barriers to schools' engagement. These issues will be examined in future research aimed at

exploring teachers' perceptions and understandings of built environment education.

- Suggestions to improve school take-up included:
  - the provision of additional training and CPD for teachers
  - greater emphasis in the National Curriculum
  - raising the profile of the built environment sector overall
  - greater partnership working and networking
  - the need for additional information and resources focusing on built environment education
  - support for health and safety guidelines/risk assessment.
- The most commonly cited means by which built environment education was promoted to schools was via promotional material such as organisational newsletters, magazines, mail-outs and websites.

Other issues

- Issues raised by interviewees focused on four areas:
  - fragmentation of the sector
  - the need to make specific links with the curriculum
  - the need to raise teacher awareness and knowledge of built environment education
  - wider issues focusing on learning outside the classroom.

Conclusions

- This research has shown a wide range of innovative activity taking place in built environment education. It has also highlighted a number of key messages which can be taken forward with the *Engaging Places* project. The interviews conducted, both during the telephone survey and case-study stage, highlight the enthusiasm of providers, teachers, students and pupils involved in built environment activities, giving them opportunities for new ways of thinking, learning and interpreting the context in which people live and work. A key element of this enthusiasm was the local grounding of much built environment education - using local relevance to introduce and develop understandings of concepts, subjects and learning areas, which can then present opportunities for wider transference, whether participants are involved in redesigning their school or their local communities, for example.
- Providers used the built environment to help teachers and pupils interpret, contextualise and understand wider political, social and cultural change. Built environment education provided opportunities for participants to map issues of culture, change, conflict and landscape interactions. For example, it allowed students to 'see' history in the built environment and understand how historical changes are manifest in the landscape. Built environment education can provide participants with opportunities to reflect on how their current actions will impact on the built environment of the future.

- The case studies show the potential that built environment projects can have for supporting and enhancing cross-curricular work and that their remit and impact is often far wider than just a specific project. The research has also shown how things like community consultation can feed into other strategies and policy developments, such as Building Schools for the Future and Sustainable Schools.

- Overall, as a result of the research, a number of questions and recommendations have been raised for consideration:

    - There are challenges that are still presented by the term 'built environment education' and issues relating to its definition. A number of interviewees struggled to understand the meaning of the term or link it with the work they were doing. This may suggest that there is still a need to raise the profile of built environment education so that schools can understand what it is and see its potential link to the curriculum. Alternatively, this may suggest that 'built environment education' is too general and covers too broad a range of disciplines that may be better off existing individually. In this sense, is Engaging Places trying to recreate something that should not exist?

    - Whilst recognising the benefits and opportunities presented for cross-curricular learning by built environment education, teachers need to be able to link it to particular curriculum subjects. Built environment education with strong and explicit curriculum links or related to particular school issues is more likely to be taken up by schools and teachers.

    - Issues of continuing fragmentation within the sector, along with the need for a strong strategic overview were raised, highlighting the potential of role of Engaging Places in assisting to 'join things up' and provide a strategic overview. However, would the sector benefit from being joined-up more? What added value would be derived by creating an additional 'umbrella' organisation over all of these other organisations? Is there a danger that the sector would become provider-led rather than user-led?

    - Finally, the study has also highlighted the need for partnerships to be formed across sectors, not just with those organisations operating in the same sector, which would also help address issues of fragmentation.

Glossary

ASC: Academy for Sustainable Communities

ASDAN COPE Qualification: Certificate of Personal Effectiveness Qualification

Built environment: The DCMS provided a categorisation of each organisation according to the type of background they operated in. This included: built environment; historic environment; museums and galleries; non-departmental public bodies; arts; subject association; education; government; regional development agency; virtual resources; lottery provider and Enterprise.

BSF: Building Schools for the Future

CABE: Commission for Architecture and the Built Environment

CPD: Continued Professional Development

DCMS: Department for Culture Media and Sport

DfES: Department for Education and Skills

Education: Built environment education included: site visits/experiences; networks; printed resources; professional development for teachers; projects with schools or colleges; virtual/web-based resources; campaigns; and maps showing location of different resources.

Telephone survey interviewees: The selection of organisations and individuals was decided by the DCMS and members of the advisory group and included: direct providers of built environment education; personnel who could offer a policy, strategy or managerial perspective on the provision of built environment education; and local authority advisors who had insights into this area.

ITT: Initial Teacher Training

JACBEE: Joint Advisory Committee on Built Environment Education

LDD: Learning Difficulties and Disabilities

LOtC: Learning Outside the Classroom Manifesto (DfES, 2006)

MLA: Museums Libraries and Archives

NQT: Newly Qualified Teacher Status

PRU: Pupil Referral Unit

Pilot regions: Included London, Yorkshire and the Humber and the South East

1 Introduction

1.1 Background

The built environment 'includes buildings of all ages and types, the spaces in between them, and their relationship with the natural environment and the local community' (Department for Culture Media and Sport (DCMS) and Department for Education and Skills (DfES), 2006). Education focusing on the built environment can have a considerably broad remit, ranging from: pupil involvement in designing and building their schools; to projects focusing on the relationship between people and places; to pupils' exploring their own communities and local built environments; and linking religions and places. It might include: practical hands-on experiences, such as building structures; contributing to 'real life' developments and projects; exploring buildings in a global context; as well as virtual experiences.

Education focusing on the built environment may have a number of benefits and can provide a wide range of creative, cross-curricular learning opportunities for young people and their communities. It can provide pupils with 'open-ended, creative learning tasks which can help increase confidence, enhance pupil motivation, provide work satisfaction and contribute to the development of social and lifelong learning skills' (DCMS and DfES, 2006). It can also provide students with opportunities to work in different and more challenging ways. Using the built environment as a learning resource might be particularly beneficial for certain groups of learners who find the classroom context challenging, for example, disengaged students (CABE, 2006). Involvement in education focusing on the built environment can also provide invaluable learning opportunities for teachers, using different materials, contexts and geographical locations to deliver the curriculum.

At a wider level, the benefits of education outside the classroom generally (which includes education focusing on the built environment) have long been recognised. The Government's support for this was reflected in the launch of its learning outside the classroom manifesto in November, 2006. The value of education outside the classroom is widely recognised as a means of encouraging a number of desirable educational outcomes, such as cognitive developments, curriculum-related outcomes, and physical, personal and social developments (OFSTED, 2004; Dillon *et al*, 2005; Rickinson *et al*, 2004).

Despite the benefits associated with education focusing on the built environment, a number of weaknesses have also been identified which are felt to be preventing progress in this area. JACBEE (Joint [DCMS/DfES] Advisory Committee on Built Environment Education) and the Attingham Trust Report (Waterfield, 2004) highlighted that fragmentation and a lack of a

strategic approach, bridging the historic and contemporary built environment, has hindered progress.

Engaging Places is a partnership between DCMS, the Commission for Architecture and the Built Environment (CABE), English Heritage and, more recently, the Academy for Sustainable Communities (ASC). *Engaging Places* aims to make people more aware of the learning opportunities available to them in the built environment and to 'unlock the educational potential of the historic and contemporary built environment'. *Engaging Places* hopes to increase schools' engagement with the built environment by developing a network which can harness and support the delivery of built environment education services to schools.

The *Engaging Places* project is running during the 2006/07 academic year and involves research in three pilot regions (London, the South East and Yorkshire and Humber) to understand what is needed to build a strong, comprehensive and sustainable network dedicated to helping children, young people and communities learn and engage with the places that surround them.

The project aims to create: a national advocacy network with strong regional representation; an *Engaging Places* web portal to simplify accessing built environment education information and resources; and a solid research and evidence base outlining the value and impact of built environment education. In September 2007, DCMS will present a report to Ministers highlighting the results of the project, together with an action plan to take matters forward.

The current research study represents an initial overview of built environment education providers within the three pilot regions.

1.2 Aims of the study

In September 2006 the National Foundation for Educational Research was commissioned by DCMS (and partners) to:

- map pilot region learning and education projects (across key stages 1 – 5) using buildings, places and spaces and to provide details of the curriculum subjects that these projects are linked to
- provide details of built environment education providers within the pilot regions, including information on their location and the resources they have available to them
- provide an overview of the partnerships and networks that built environment education providers have with other organisations, such as Architecture Centre Network, Heritage Link, Heritage Education Partnership, Museums and Galleries, the Arts Council, Creative Partnerships, Regional Development Agencies, Engaging Places and Regional Cultural Consortiums.

1.3 Methods

There were three complementary strands to the study: an orientation phase to identify providers; a telephone survey of providers; and telephone case-study work.

1. Orientation phase: identifying providers

An initial mapping exercise was undertaken in order to identify built environment education providers working with schools in the three pilot regions (London, the South East and Yorkshire and Humber). This included contacts identified by DCMS and the project steering group; a web-based overview of organisations working within this area; and organisations and contacts identified by experts in the field.

2. Telephone survey

Once the initial mapping exercise had been completed, DCMS and the project steering group identified 90 organisations linked to built environment education (either policy makers, providers, or local authority representatives) for inclusion in the telephone survey. Short 15 minute telephone interviews were conducted with organisation representatives to gather further information about: the provider; details of built environment education projects with which they were involved; the age range and type of young people with whom they worked; the curriculum subjects to which the projects, activities or experiences were linked; funding; views on take up of educational opportunities by schools; and details of links with other organisations, partnerships or networks.

3. Telephone case-study work

Following the telephone survey, the DCMS and project steering group selected 9 case studies (four from London; three from Yorkshire and the Humber; and two from the South East) to provide additional information on how education projects focusing on the built environment operated on the ground and to illustrate the breadth and variety of provision (issues and approaches). They are to be seen as building on those case studies selected in Laying the Foundations: using the built environment to teach (DfES and DCMS, 2006)

The case studies consisted of short telephone interviews with: representatives from the organisation involved (i.e. the built environment education provider); a school representative (i.e. teacher) who had worked with/been involved in an activity with the provider; and a pupil/student involved in the project/activity. Interviews focused on providing more detailed insights into the projects/activities, including: its aims; the activities provided; identified

outcomes and impact; challenges and lessons learned; sustainability and transferability; and details of resources accessed.

During the telephone survey and case-study work, interviewees were sent interview schedules prior to the interview taking place. A number of the questions on the schedules were presented as a series of tick boxes to allow a swift and consistent form of response.

1.3.1 Data analysis

Details of all the contacts identified were entered into Excel spreadsheets which allowed responses to be categorised according to:

- type of provider
- geographical location
- type of interviewee i.e. strategic, operational or local authority representative.

The three spreadsheets have been provided to DCMS and act as an initial directory by providing all the information collected from organisations during interviews.

Maps were also produced to show the geographical location of providers interviewed within the three regions (see pages 9-11).

The interview schedules were designed so that responses could be easily quantifiable, in terms of, for example, the types of education focusing on the built environment provided, the age range that providers worked with and identifying the curriculum areas that they linked their activities to.

Throughout the report, regional differences have been highlighted where appropriate to do so. However, because of the small and uneven number of organisations in each of the three regions, it was not possible to make any reliable, overall statements.

1.4 Report structure

The report draws on data from all three strands of the research. Following this introduction:

Chapter Two presents the findings from the telephone survey and provides: an overview of respondents; types of education provided; details of partnerships and networks; the young people worked with; the curriculum areas linked to; the length of projects; funding sources; and the take-up by schools.

Chapter Three presents the case studies identified in each region. Each case study focuses on: the rationale for selection; an overview of the project/activity including who was involved, the project aims, its duration and funding; details of outcomes and impacts (for pupils/students, teachers/schools, the provider); benefits, challenges and lessons learnt; opportunities for transferability and sustainability; and five key facts.

Chapter Four concludes the report by providing an overview of the key findings.

The **Appendix** details the organisation representatives interviewed during the study and includes contact details.

2 Overview of provision

Key findings

Geographical remit: In the main, providers stated that they served either a regional or national audience (both accounting for a third each). This perhaps signifies the tendency for built environment education providers to view their remit as beyond the local area. Representatives from eight organisations indicated that they worked mainly and, for some, deliberately with the local community. A small sub-set of providers (5) stated that they served audiences drawn nationally, regionally and locally.

Types of education: Built environment education activities undertaken by organisations most commonly included: site visits and experiences; networks; printed resources; professional development for teachers; projects with schools/colleges; and virtual/web-based resources.

Partnerships and networks: The types of partnerships organisations had developed or participated in varied quite substantially, with interviewees citing over 100 different organisations with which partnerships has been forged. Partnerships included links with local organisations such as local authorities, as well as national organisations such as CABE and the Architecture Centre Network. Typically, they were networks and partnerships of organisations working in the same sector, for example the Heritage Education Group representing heritage organisations.

Young people worked with: Most organisations worked across key stages 1–5 and did not tend to work solely with one particular age group. Those who additionally worked with specific groups of young people most commonly mentioned: disengaged/disaffected young people; black and minority ethnic groups; children with learning difficulties and disabilities; and gifted and talented children.

Curriculum links: Projects, activities and experiences were linked to a range of curriculum areas, including: traditional subjects, vocational skills and informal learning (such as out of school hours and family learning). The most frequently identified curriculum subjects were those traditionally likely to include education of this nature (i.e. art and design, geography, and history). However, the prevalence of work linked to the citizenship curriculum may further demonstrate the cross-curricular benefits of built environment education.

Length of education sessions and projects offered: The most common type of education projects were for short periods of time (i.e. sessional activities). However, nearly as many interviewees stated that they were involved in long-term projects of six months or more.

Funding sources: Organisations received funding from a combination of national, regional and local funders. Approximately two-fifths of organisations stated that schools paid for their services, with prices ranging from £2.00 to £4.00 per head.

Take-up by schools: Respondents most commonly stated that the current take-up or level of interest from schools in built environment education was 'too variable to comment' or they were unable to comment. However, when interviewees did provide a rating they were generally positive. Suggestions to improve take-up included: training and CPD for teachers; greater emphasis on built environment education in the National Curriculum; raising the profile of the built environment sector overall; greater partnership working and networking; more information and resources; and support for health and safety guidelines/risk assessment.

Other issues: Issues raised by interviewees focused on four areas: fragmentation; links to the curriculum; teacher awareness and knowledge of built environment education; and issues with learning outside the classroom.

In order to map the extent, nature and range of built environment education in London, the South East and Yorkshire and the Humber, short 15 minute telephone interviews were conducted with 93 representatives from appropriate organisations and local authorities. This chapter provides an overview of the findings in relation to the following:

- type of organisation and geographical remit
- types of education provided focusing on the built environment, background information regarding development and any support provided
- partnerships and networks with other organisations providing built environment education
- age ranges worked with and any work with particular groups of young people
- details of curriculum areas to which education focusing on the built environment is linked
- typical length of projects
- funding sources
- take-up by schools and how they find out about the activities provided.

It should be noted that regional differences have been highlighted where appropriate. However, because of the small and uneven number of organisations in each of the three regions, it was not possible to make any reliable, overall statements.

2.1 Type of organisation and geographical remit

To ensure that the telephone survey captured the views of a range of stakeholders operating in the built environment sector, interviews were conducted with three types of respondent: direct providers of built environment education; personnel who could offer a policy, strategy or managerial perspective on the provision of built environment education; and

local authority advisors who had insights into this area. The selection of organisations and individuals was decided by the DCMS and members of the advisory group.

2.1.1 Profile of organisations

The majority of interviews were conducted with built environment education providers (44) and policy, strategy or managerial personnel (43). A small number (6) of interviews were conducted with local authority advisors which reflected the challenge of identifying relevant individuals to speak to with a specialism in this area.

Table 2.1 provides a breakdown of interviewee according to region. The built environment education providers included in the survey were predominantly from London (18) and Yorkshire and the Humber (15). Eight of the providers were from the South East, whilst a minority (3) were deemed national providers (these were: Canterbury Cathedral; National Monuments Record; and CAPE UK). The vast majority of policy/strategy/managerial interviewees represented national organisations, thus demonstrating the organisational 'overview' that these interviewees had.

Table 2.1 Type of interviewee by region (number of respondents)

Regional location	Provider	Policy/strategy/ manager	Local authority advisor
	(N)	(N)	(N)
London	18	0	2
South East	8	1	3
Yorkshire and the Humber	15	7	1
National	3	35	-
Total	**44**	**43**	**6**

Source: NFER interviews September 2006-January 2007

Figures 2.1 to 2.3 show the geographical location of providers interviewed within each of the three regions. Figure 2.1 shows that the providers spoken to in London were primarily based in inner London Boroughs, with only Fundamental Architectural Inclusion based in an outer London Borough (Newham). Providers spoken to in the South East and Yorkshire and the Humber were roughly spread across these regions.

Figure 2.1 Built environment education providers: London

Figure 2.2 Built environment education providers: South East

Figure 2.3 Built environment education providers: Yorkshire and the Humber

The DCMS provided a categorisation of each organisation according to the sector in which they operated (i.e. built environment, arts, historic environment etc.). Table 2.2 shows that organisations included in the telephone survey were predominantly from the historic environment and built environment sectors. This was the case for both providers and policy, strategy or managerial personnel. Interviews conducted with museum and gallery representatives and those organisations associated with the arts were mainly at the provider level. Policy level interviews included a range of key organisations that provided a comprehensive 'overview' of built environment education in general, such as: key non-departmental public bodies (for example, the Specialist Schools Trust and CABE); government departments (for example, DCMS, DfES and Olympic 2012); regional development agencies (such as South East England Development Agency, Yorkshire Forward); and subject associations (for example, The Historical Association and the Geographical Association).

Table 2.2 Type of interviewee by sector (number of respondents)

Sector	Overall	Provider	Policy/strategy/ manager
	(N)	(N)	(N)
Historic environment	27	13	14
Built environment	24	15	9
Museums and galleries	12	9	3
Non-departmental public bodies	5	1	4
Arts	4	3	1
Subject association	4	0	4
Education	3	2	1
Government	3	0	3
Regional development agency	2	0	2
Virtual resources	1	1	0
Lottery provider	1	0	1
Enterprise	1	0	1
Total	**87**	**44**	**43**

Source: NFER interviews September 2006-January 2007

A comprehensive list of all organisations included in the telephone survey, categorised by interviewee type and region, is presented in the Appendix. Contact details are also provided for each organisation.

Six local authorities were included in the telephone survey. Table 2.3 provides details of the local authorities included in the survey and the job title of the representative interviewed.

Table 2.3 Type of local authority and role of local authority advisor

Region	Name of local authority	Role of local authority advisor
London	Camden Borough Council	Camden Young Archaeologists Programme Coordinator
	Newham Borough Council	Arts Advisor
South East	New Forest District Council	Environmental Design Manager
	Kent County Council	History Advisor
	Hampshire County Council	Trailblazer Project Manager and the Deputy Head of Learning, Access and Interpretation Team for the Museums and Archives Service
Yorkshire and the Humber	East Riding Borough Council	Teaching and Learning Consultant for the Creative Arts

2.1.2 Geographical remit of organisation

In order to determine their geographical remit, built environment education providers were asked to indicate whether they considered their audience to be drawn nationally, regionally or locally. Table 2.4 shows that, in the main, providers stated that they served either a regional (16) or national (15) audience (both accounting for a third each). This perhaps signifies the tendency for built environment education providers to view their remit as beyond the local area.

Table 2.4 Geographical remit of organisations (number of respondents)

Geographical remit	Provider
	(N)
National	15
Regional	16
Local	8
Other	5
Total	**44**

Source: NFER interviews September 2006-January 2007

In contrast, representatives from eight organisations indicated that they worked mainly and, for some, deliberately with the local community. The majority of these organisations (six) were based in London, with two from Yorkshire and the Humber (South Yorkshire Centre of Vocational Excellence –Dearne Valley College; Doncaster Design Centre). This highlights that there may be a greater need and/or recognition by providers to work specifically with local schools in the London region, possibly due to issues of regeneration, deprivation or opportunities unique to the region that readily allow children and young people to engage with built environment activities (i.e. preparations for the 2012 Olympics).

Finally, a small sub-set of providers (5) stated that they served audiences drawn nationally, regionally and locally. For example, the representative from Sir John Soane's Museum stated that, although the Museum predominantly had a national remit, there were outreach workshops and exhibitions that toured regionally. These five organisations were from across the three regions and included those from the built environment; historic environment; and museum and galleries sectors.

2.2 Types of education provided focusing on the built environment

Interviewees were asked to provide details of built environment education-focused projects that their organisation was either currently involved with, or that were available within the local authority. Interviewees could select from eight types of built environment education that they might provide (listed in Table 2.5), including any 'other' activities that were not listed. Table 2.5 provides an overview of the responses from providers and those policy/strategy/managerial personnel involved in direct delivery of built environment education activities (31 out of 43).

Table 2.5 Types of built environment education (number of respondents)

Types of education	Provider	Policy/strategy/ manager
	(N = 44)	(N = 31)
Site visits/experiences	39	19
Networks	39	26
Printed resources	37	22
Professional development for teachers	36	21
Projects with schools or colleges	35	24
Virtual/web-based resources	26	22
Campaigns	24	21
Maps showing location of different resources	18	-
Other	16	11

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

The top five built environment activities undertaken by providers were: networks; site visits and experiences; printed resources; professional development for teachers; projects with schools or colleges; and virtual/web-based resources. The prevalence of these activities was broadly comparable across regions and sectors. However, analysis did reveal that historic environment organisations were less likely to report undertaking project work with schools and/or colleges than other sectors. This may be explained by the site-based experiences associated with many of the organisations operating in this sector and, thus, the typically short-term activities they provided (i.e. day visits to properties, historic buildings and cathedrals).

More detailed examples of the different types of education provided by organisations are presented below:

Site visits and experiences

Organisations providing site visits and experiences were mainly from the built environment; museums and galleries; and historic environment sectors. More detailed exemplars of site visits and experiences are outlined in Figure 2.4

Figure 2.4 Examples of site visits and experiences

At **Canterbury Cathedral** guided tours are offered to visiting schools. During this visit to the Cathedral, the students undertake activities including, brass rubbings and costume trails.

Greenwich Foundation for the Old Royal Naval College runs a number of workshops for visiting schools. These workshops focus on the buildings, their structures and their history. Greenwich Foundation staff described the site visits as '*using the building to really open and unlock the site*' and considered this site visit a major remit of their work. In addition to site visits and workshops, Greenwich Foundation staff are currently running some vocational taster days to interest young people in craft skills needed in the heritage sector, such as stone carving and gilding.

DIG, an archaeological museum in York offers students the chance to experience real, hands-on archaeological activities. Students have the opportunity be an archaeologist and take part in a dig and touch real artifacts. The museum has rubber soil which the students have to dig through in order to access the layer underneath. There are real artifacts contained within the soil and the students' experience uncovering these with trowels and brushes. They are all based on real archaeological sites in York.

At the moment DIG is developing its workshops in three areas:

1. 'Secrets in the soil' which is based on environmental archaeology

2. 'Beneath the floorboards' which compares Victorian houses with modern houses and looks at what might found beneath the floorboards

3. It is in the process of developing 'Burials and Beliefs' which will look at the built environment in terms of what people have left behind as a lasting memorial.

The Prince's Foundation for the Built Environment and the University of Greenwich work together to deliver a school-site building project. It involves pupils from a Greenwich primary school studying the built environment of their school and designing a structure and a garden in-between two outbuildings on the school site. One of the pupil's design ideas was chosen by school staff and was made into a real 'live' design brief, with pupils and parents helping to build the structure and garden on the school site.

Networks

Most respondents indicated that they were involved in partnerships and networks, Section 2.3 provides further details.

Printed resources

Interviewees provided three main types of printed resources, which were:

- generic information for schools and teachers (i.e. background information about the provider; how the work linked to the National Curriculum);
- specific information for schools and teachers linked to the session/visit (i.e. activity sheets, trails, student worksheets)
- published materials (i.e. published books and guidance on the built environment in education).

There were no distinctive differences in the types of printed resources cited by interviewees according to region or sector, Figure 2.5 provides illustrative examples.

Figure 2.5 Examples of printed resources

At **English Heritage's Dover Castle** teachers are provided with free Teachers Notes (available in printed form and downloadable online) offering information to support pre-visit and follow up work. There is a Teachers' Handbook available for £3.99 and free Hazard Awareness information sheets (available on request in printed form or downloadable) to support teachers in writing their risk assessments. There is also an Education Centre Manager situated at the castle to manage bookings and to assist with and advise on visits which can help teachers develop further worksheets focusing on the themes, such as design and architecture.

Education staff at **De La Warr Pavilion** have worked with an Artist/Educator and local teachers to develop an information/resource pack for teachers and students visiting the building. The pack contains activities that can be used before, during and after a visit to the Pavilion, along with clear curriculum links. Teacher notes are also provided for all major exhibitions held at the Pavilion and include information about the exhibitors and suggestions for student discussions.

Professional development for teachers

Table 2.5 reveals that many of the organisations included in the telephone survey reported undertaking some form of professional development for teachers (providers n=36/44; policy n=21/31). Several interviewees stressed the emphasis they placed on this, stating that there was a need to educate teachers about the use and application of the built environment in order to raise its profile and use it within the curriculum. Interviewees typically mentioned three types of professional development activities undertaken with teachers. These were:

- formal activities, for example, INSET training days, study days and conferences
- informal activities, which included providing training whilst directly working with a teacher on a project

- initial teacher training (ITT) and/or training for those teachers with Newly Qualified Teacher (NQT) status.

When analysed by region and sector, the main finding was that those organisations stating they provided ITT and training for NQTs were mainly from Yorkshire and the Humber and from the historic environment sector. For example, the National Trust in Yorkshire had provided some initial teacher training to students at York St John's teacher training college. In addition, some of the sites in the region had provided placements for students from Newcastle University's Heritage, Education and Interpretation Masters course.

Three organisations included in the telephone survey reported that they ran dedicated programmes of work specifically related to professional development of teachers about built environment education. These were: The Solent Centre for Architecture and Design; The Kent Architecture Centre; and The University of Sheffield's School of Architecture. Details of these projects are provided in Figure 2.6.

Figure 2.6 Examples of professional development activities for teachers

The Solent Centre for Architecture and Design runs the 'Partner Programme'. This programme aims to enskill teachers by providing architects to work alongside teachers in schools involved in the programme. The architects provide teachers with advice and support on built environment education activities such as establishing and running a built environment club. The aim is that these schools will then act as 'advocates' of built environment education and will disseminate information to other schools across the region.

Following on from their 'Shaping Places' work, which put architects and planners into schools, **The Kent Architecture Centre** is planning to run a professional development scheme for teachers. This scheme will provide teachers with the necessary skills to run built environment education projects in the school setting. The scheme aims to improve teacher confidence in providing built environment education.

Staff at **The University of Sheffield's School of Architecture** are currently undertaking a two-year programme with schools and youth groups. The first stage of the programme focuses on raising awareness amongst teachers and youth workers for opportunities to learn through the built environment (there are 90 participants in the programme). The second stage will involve working with two primary and two secondary schools engaged in built environment activity in order to evaluate its long-term value.

Projects with schools and colleges

Fifty-nine organisations stated that they undertook project work with schools or colleges. The case studies described in Chapter 3 provide in-depth examples of the types of project work undertaken. However, some additional examples are presented in Figure 2.7.

Figure 2.7 Examples of projects with schools or colleges

The **National Trust** run two project specific schemes for schools, both aimed at developing long-term and sustainable relationships between schools and National Trust properties. Firstly, the Guardianship Scheme focuses on getting schools to make repeat, consistent visits to one National Trust site. The Scheme has been established for over 15 years and has over 100 primary and secondary schools involved in it across the Country. The Schools Art Partnership Scheme focuses on linking two schools from very different backgrounds, such as urban or rural, together. The two schools meet at one of the National Trust properties and use art as a 'mutual creative medium' to work together.

The Churches Regional Commission for Yorkshire and the Humber is currently working with five other churches, which have mainly black minority ethnic populations, in Bradford. The project is looking at inter-generational issues around the buildings. For example, why do people from the Caribbean come to Bradford and set up their own churches? Next year the Commission is planning to work with a dance group to look at interpreting the building through the medium of dance.

Fundamental Architectural Inclusion is currently engaged in a project called 'Bridging the Gap', which involves three secondary schools and their primary feeders in Newham. The project is specifically focused on the built environment changes that will be a result of the 2012 Olympics. One aspect of the project will involve running creative road shows in schools so as to increase awareness and knowledge of regeneration and associated issues.

The Building Exploratory is planning a project (early 2007) focusing on religious buildings: 'Religion and Places in Tower Hamlets'. The project will involve five different classes from five different secondary schools. Each class will have two religious buildings that they will contrast with each other. The students will visit the buildings and gain insights and understanding of them through the views of their users. They will then work with a dedicated artist, exploring their perceptions and understandings of different faiths. The end result will be a series of 'faith tests' that represent the artwork produced by the students and the artists in response to the religious buildings. These pieces will be displayed in a community exhibition in Tower Hamlets. There will also be a publication which will be sent to every secondary school student in Tower Hamlets.

Organisations working in Yorkshire and the Humber were most likely to report undertaking project work with schools and colleges, followed by those in the South East and then London.

Virtual and web-based resources

Virtual and web-based resources were, for many organisations, one of the key services they provided to schools. Indeed, one interviewee stated that their website and resources on the website was a '*primary resource*' for their users (Solent Centre for Architecture and Design). The types of virtual and web-based materials cited by interviewees included e-books that could be used when teaching and worksheets/information sheets that could be downloaded prior to a visit.

Three web-based organisations were included in the telephone survey and are described in Figure 2.8.

Figure 2.8 Examples of virtual and web-based resources

'My Learning' is a website for teachers and learners containing information about museums, libraries and archives in the Yorkshire region. The website provides 'learning journeys' which are teaching resources that can be used in a variety of different subject areas (for example, mathematics, design and technology, history). The learning journeys provide activities and ideas for lessons based on a specific theme, for instance the history of Hull, which includes information on the buildings in the city.

London Schools Arts Service (LONSAS) is an online arts and education resource for London schools. Teachers can access specific artists, organisations or activities by searching the database of members. The database has details of some artists that provide built environment education, which teachers can assess and contact. Artists will work in schools undertaking activities, such as built environment education.

The **24 hour Museum** is a national virtual museum containing a database of museums, libraries, archives and heritage sites across the UK. It has a search facility which allows users to discover activities that are going on across the UK and in their local area. The resource is updated daily and includes details of built environment activities, such as Architecture Week.

Other activities

The least frequently identified activities by interviewees were involvement in campaigns and the use of maps in project work. Where campaigns were noted, the most common examples related to specific activities to raise awareness of particular built environment activities or related issues. Architecture Week was the most frequently identified but other campaigns that were mentioned included: 'Open House'; 'History Matters'; 'Moving History'; 'Archaeology Week'; 'Black History Month'; 'Heritage Open Days'; 'Dig Draw'; 'Enterprise Week'; 'Science Week'; and 'Walk to School Campaign'.

Interviewees also highlighted specific issues which they were involved in, such as campaigns related to raising the profile of built environment education and Learning Outside the Classroom more generally. The Council for British Archaeology (CBA) for example, aims to '*make sure that archaeological evidence and approaches are there within the education system*'. The CBA has also run campaigns to highlight and promote the sector, such as their campaign to retain the GCSE in archaeology, which was abolished two years ago.

With regards to using maps in their work, interviewees interpreted this question in a number of ways. Specifically, some organisations reported providing map resources to schools during workshop sessions and/or projects. For example, organisations reported using Ordnance Survey maps whilst working with schools and students. These providers were: the National Monuments Record; Public Arts; Our Hut; The Solent Centre for Architecture and Design; and the National Railway Museum.

Other organisations stated that they used maps to provide visitors with information about other, similar activities that were available across the region. For example, the Churches Regional Commission for Yorkshire and the Humber provided a map detailing churches in the region and the range of educational activities that each offered. Finally, some organisations reported using maps to show visitors what was available at key points/locations on their site/facility, thus acting as a visual guide for them.

A number of organisations (27) stated they offered other types of built environment activity that were not covered by the list of options given. The predominant 'other' types of activity were:

- research (for example, Yorkshire Museums, Libraries and Archives Council had conducted research into which schools visited or did not visit local museums and galleries).
- workshops and talks with students about the built environment (for example, the Victoria and Albert Museum provided talks to schools, with one specific session called 'Architecture on the move')
- specific organisational schemes (for example, The Institute of Civil Engineers highlighted their 'construction ambassadors programme' which included engineers giving presentations to graduates about working with schools. It is hoped that these graduates will work with schools in the future and deliver built environment activities independently).

2.2.1 Activity development

Built environment education providers were asked to describe how the activities they described were established and developed. Most commonly, organisations described the role of appointed education officers or teams and the adoption of an education programme in developing their resources. Many

mentioned that this also involved discussions with other built environment education providers and consultations with key participants such as teachers and young people. Specifically, 19 interviewees stated that the local authority had provided some form of advice during the design of built environment activities, resources and networks. Providers mainly cited individual local authority advisors, who had either an interest or specialism, as being the means through which they had received this advice and support. Local authority advice was most apparent in the South East. In addition, advice was reported most often by those organisations operating in the built environment, historic environment and museums and libraries sectors.

2.2.2 Built environment provision in local authorities

Local authority interviewees were presented with a list of nine types of built environment provision (listed in Table 2.6) and asked to indicate if these types of provision were available in their local authority. Table 2.6 presents the different types of provision identified by interviewees, with illustrative examples.

Table 2.6 Local authority built environment provision

Types of provision	(N)	Examples
Archaeological activities	6	Camden Borough Council has a Young Archaeologists project.
Community-based activities	6	Kent local studies library has been working with schools, libraries and colleges in Margate looking at the local built environment and regeneration issues.
Historic environment activities	6	Kent archives service (Centre for Kentish Studies) has a website which shows 50 surveys based upon the English Heritage historic towns' surveys. This includes images of the local area.
Historic site activities	6	Interviewees focused on the National Trust and English Heritage properties located within their Local authority.
Sustainable design and development	6	Kent County Council has a 'Green Team' in the Planning Department which deals with environmental, waste and sustainable design issues.
Sustainable Schools	6	Hampshire County Council has a Sustainable Schools Forum which is made up of advisors from across the authority.
Architecture Centres	5	A representative from the New Forest District Council sits on the board of directors for the Solent Centre for Architecture and Design. The local authority has a role in supporting the principles and objectives of the centre.
Buildings Schools for the Future (BSF)	5	BSF is viewed as an important intervention across the local authorities. In Camden, the consultation element of implementing BSF was seen as particularly important.
Industrial buildings based activities	4	East Riding Borough Council runs a project called 'Creative Context for Learning'. This is an arts led cross-curricula programme focused on getting artists into schools to work directly with pupils. The programme is thematic and so the focus changes every year. Currently, the theme is 'Buildings' and approximately 80 per cent of the schools in the area are conducting some project work related to the built environment. This can include looking at industrial buildings in the local area.

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

2.3 Partnerships and networks

Taken as a whole, the vast majority of respondents indicated that their organisation or local authority was involved in partnerships and/or networks with other built environment-related organisations. A minority (four) of

interviewees indicated they were not involved in any built environment partnerships or networks.

Table 2.7 Partnerships/networks

Partnerships/networks	Provider	Policy/strategy/ manager	Local authority advisor
	(N)	(N)	(N)
Yes	40	39	6
No	3	1	0
Don't know	0	0	0
Other	0	2	0
No response	1	1	0
Total	**44**	**43**	**6**

Source: NFER interviews September 2006-January 2007

The types of partnerships organisations had developed or participated in varied quite substantially, with interviewees citing over 100 different organisations with which partnerships had been forged. Local, regional, national and international (such as PLAYCE) organisations were cited and ranged from RIBA, to Sheffield Industrial Museums Trust, to local Tourism alliances. Table 2.8 provides details of the most commonly mentioned organisations with which interviewees stated their own organisation was in partnership.

Table 2.8 Partnership organisations (number of respondents)

Organisation	Number reporting partnerships with other organisations
	(N = 85)
CABE	15
Local authorities	14
Schools and teachers	10
Architecture Centre Network	9
Museums Libraries and Archives	7
Heritage Education Group	7
Universities	7
English Heritage	8
DfES and DCMS	6
National Trust	5
Historic Houses Association	5
Churches Conservation Trust	5

This was an open response question
Source: NFER interviews September 2006-January 2007

Interviewees included representatives from partnerships such as Heritage Link and the Civic Trust. Heritage Link was established to provide a network and collective voice for heritage organisations working in the voluntary sector. The partnership works on a number of levels: it provides a fortnightly e-bulletin called ‘Heritage Link Update’ (which goes out to 7000 individuals); it has an Education Task Group; and also runs regional networking events.

Figure 2.9 provides some examples of the different partnerships and networks with which organisations were involved:

Figure 2.9 Example of partnerships and networks

A current objective of **South East England Development Agency** (SEEDA) and the Regional Centre of Excellence is to establish networks and become more aware of what people are doing regarding built environment education. SEEDA works closely with the local architecture centres, the Academy for Sustainable Communities, CABE and other organisations working in the region (i.e. Groundwork, Planning Aid). The agency is also currently involved with the Urban Renaissance Institute at Greenwich University, which aims to make links between universities and practitioners, and is starting to look at what it might do in terms of education. It has just run an event called 'Designer for a day' which provided a taster session for key stage 4 students about what it would be like to have a career in design.

The interviewee from **The University of Sheffield's School of Architecture** sits on an international organisation for children's architecture and education called PLAYCE. In addition, the University is currently involved in a three-year longitudinal study looking at four schools as they go through the design process involved in rebuilding their school. Partners included in the research are Building Schools for the Future, Partnerships for Schools, School Works and CABE.

Canterbury Cathedral regularly networks with English Heritage's St Augustine's Church and the Museum of Canterbury. The aim of this network is to encourage school parties to visit the Cathedral, Church and the museum as one visit. In addition, the Cathedral's Director of Visits liaises with Kent Tourism Alliance and meets the coordinators of local attractions. The Head of Archives works directly with Kent County Council Libraries and Archives Division and the Cathedral's Education Officers network with other officers in the South East and nationally.

London-based **Arts Inform** has a long history of partnership working with RIBA. It has run a series of programmes, each involving a number of projects, including, for example, 'Space in the River', 'Designs on London', 'Design on Britain' and 'Architects in Residence'. These projects involved an individual architect, from leading practices, working with a teacher on a programme of work that was curriculum-focused to '*create their own visual briefs, proposals for public art or development plans for regeneration of local areas*'.

The Serpentine Gallery works closely with Westminster local authority. Staff from the gallery report that when working with schools, they always try to have a local authority contact to formalise their relationship.

There were no clear differences between the partnerships developed across the three pilot regions. However, partnerships were typically forged between other organisations working in the same or similar sector. For example, the Heritage Education Group is a network of heritage representatives who meet to discuss ways of working together to improve built environment and heritage education. In addition, those interviewees from churches and cathedrals cited

the Pilgrims Association as being one network they were associated with, whilst interviewees representing museums noted their close involvement with other museums, libraries and archives (MLAs), often at a local or regional level. However, one interviewee highlighted the drawback of just developing partnerships with organisations operating in the same sector: '*the most fruitful partnerships are between organisations with different areas of expertise, experience and remit'*.

Most interviewees indicated that the partnerships/networks they were involved in operated on a range of levels. This varied from formal meetings and representation on steering groups, through to newsletter contact, email and website correspondence, and informal discussions. However, many interviewees also felt that there was a need to further formalise these relationships and develop more established partnerships. *Engaging Places* was considered to be one way in which this could be achieved.

2.4 Young people worked with

A key aim of the research was '*to map pilot region learning and education projects across key stages 1 – 5*'. As such, a specific question was posed to built environment education providers regarding the age range of pupils their organisation worked with.

2.4.1 Age range

As Table 2.9 shows, providers worked with children and young people from across key stages 1–5 and did not tend to work solely with one particular age group. The Foundation stage was the age group least likely to be involved in built environment education, although this was still nominated by just under half of providers as being a group they had previously worked with.

Table 2.9 Age range of pupils built environment education providers worked with (number of respondents)

Age range	Provider (N = 44)
Foundation	22
Key stage 1	36
Key stage 2	40
Key stage 3	40
Key stage 4	40
Key stage 5	36

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

Just under half (21) of built environment education providers indicated that they all worked with school age children and young people (i.e. from Foundation through to key stage 5), showing the range of types of activity/resources available. These organisations were spread across the three regions and sectors.

Interviewees from four organisations stated that they worked only with secondary age students. These were: Arts Inform; The Architecture Foundation; The Glass House Community Led Design; and South Yorkshire Centre of Vocational Excellence (CoVE) – Dearne Valley College. In contrast, Groundwork Thames Valley was the only organisation to indicate that they worked solely with primary age children. No organisation worked specifically with just one key stage.

2.4.2 Work with specific groups of children and young people

Built environment education providers were also asked to indicate whether their organisation worked with specific groups of children and young people, for example, disengaged young people or those with learning difficulties and disabilities (LDD). Of the 44 built environment education providers interviewed, over half (25) stated that they worked with specific groups of children and young people. However, it should be noted that many organisations stated that they would work with any group as and when a project arose. Proportionately, organisations from Yorkshire and the Humber and those working in the museums, libraries and archives sector were most likely to state they worked with specific groups of children and young people.

The most commonly identified groups of children and young people were:

- disengaged/disaffected young people
- black and minority ethnic groups
- children with learning difficulties and disabilities
- gifted and talented children.

Figure 2.10 provides examples of projects involving these four groups.

Figure 2.10 Projects with specific groups of young people

My Learning recently worked with a group of disengaged children and young people and a local museum in Hull. The output included a video which was produced by the children and young people about stories from the streets of Hull. This was placed on the My Learning website as a 'learning journey' for other schools and teachers to use as a resource. My Learning also undertook a project with black and minority ethnic children and young people in Bradford. The project used the painting 'An Arab waver' which depicted a courtyard scene. The painting was used in work with the group to create an interactive virtual learning journey which showed the painting, the architecture depicted and allowed the group to interact with the painting – students changed the angle and view of the courtyard and 'de-constructed' it down to specific elements.

Canterbury Cathedral has worked with children who have a range of special needs, including those with mild learning difficulties; those who attend mainstream schools; those who are severely physically disabled; and, increasingly, autistic children. Education officers work with visiting teachers to provide the content and the experiences the teachers are looking for to meet the needs of specific students. Many teachers want an opportunity for a tactile tour which can include feeling the carvings in the choir stalls and on the tombs. The Cathedral also has an activity room with a range of kinaesthetic activities that relate to the building, including stone carvings.

Eureka! The Museum for Children has conducted specific project work with gifted and talented young people. For example, the museum ran a project based at the Museum of London over two days. The project involved the young people looking at disaster management issues. They were presented with a number of scenarios and asked to devise and plan solutions to the problems, such as reinstalling the power supplies and ensuring fresh drinking water.

Work with other groups of children and young people included:

- refugees and asylum seekers
- special schools
- Pupil Referral Units (PRUs)
- blind or visually impaired children and young people
- young offenders.

Examples of some of these projects are outlined in Figure 2.11:

Figure 2.11 Examples of projects with refugee and visually impaired groups of young people

Staff at the National Trust's **Sutton House** have worked with two local schools during 'Refugee Week'. The house and the themes focused on within the house (i.e. that historical residents of the house were also refugees) were used to allow the students to explore their own experiences. In 2006, students worked with a musician, artist and film-maker to produce pieces of work about their experiences of being a refugee. These pieces of work (i.e. art, films) were placed on display in the house and the young people's peers and families visited and viewed the pieces of work.

The National Railway Museum hosts an annual event called 'Please Touch' which '*brings the Museum's collections to life for people with sensory, mobility or learning difficulties*'. The collection includes a number of objects and vehicles such as the Royal Trains, the Japanese Bullet Train and Mallard and the brand-new Flying Scotsman exhibition. Activities include a train ride, access to some carriages and locomotive footplates, object handling and brass rubbing. The emphasis is on the tactile nature of the activities.

2.5 Curriculum links

Built environment education providers were presented with a list of 16 curriculum areas (see Table 2.10) and asked to indicate the areas their built environment education activities were linked to. Interviewees could also note any 'other' curriculum areas that their work linked to. In the main, analysis of interviewee responses revealed that providers were linking their projects, activities and experiences to a range of curriculum areas, including traditional subjects and also vocational skills and more informal learning such as out of school hours learning and family learning. Interviewees frequently stressed that they considered their work to have a cross-curricular focus, and indeed, that this was one of the benefits of built environment education. Interviewee responses, ranked in order of frequency, are shown in Table 2.10.

Table 2.10 Curriculum subjects to which built environment education projects linked

Curriculum subjects	Provider (N=44)
Art and design	36
Geography	33
History	32
Citizenship	31
Science	30
Design and technology	27
English	27
Mathematics	23
Religious education	18
Information and communication technology	17
Personal, social and health education	15
Other	13
Physical education	7
Modern foreign languages	4

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

The top five curriculum subjects to which respondents indicated their built environment education projects specifically linked were mainly those that, traditionally, were likely to include education of this nature (i.e. art and design, geography, and history). However, the prevalence of built environment education projects that were linked to the citizenship curriculum may also demonstrate further the cross-curricular benefits of it as a medium. When analysed by region and sector some notable difference emerged. Specifically, organisations from Yorkshire and the Humber were least likely to report that their work linked to geography. In addition, organisations from the historic environment sector typically linked their work to history and art and design, but were not commonly linking their work to the design and technology curriculum.

Approximately two-fifths of providers linked their work to all of the top five curriculum areas. These organisations were spread across regions and sectors. In contrast, two organisations stated that they linked their work to all curriculum areas. These organisations were: The Serpentine Gallery and Groundwork-South East.

Modern foreign languages (4) and physical education (7) were the least common curriculum areas to which built environment education providers specified that their projects, activities or experiences were linked.

Figure 2.12 provides some instances of how different projects linked to specific curriculum areas.

Figure 2.12 Curriculum links

Weald and Downland Open Air Museum has recently undertaken a built environment education project that linked specifically to the mathematics 'A' level curriculum. Museum staff worked with a group of 'A' level students from a local school looking at the application of mathematics in relation to one of the buildings on the museum site.

ARC has worked with and supported schools in the delivery of key stage 2 design and technology. Centre staff have successfully placed an architect within schools to work with teachers and pupils during lessons, around ideas of landscapes.

A school working with the **Solent Centre** as part of the 'Partner Programme' (intended to train and support teachers in use of built environment education in the curriculum) has recently undertaken an audit of the curriculum in order to incorporate built environment education more readily into the secondary curriculum. This has included the ICT department developing an activity for Year 10 students that asks students to design their own school using computer software. Year 7 pupils also take part in a Citizenship Day every year. This involves pupils looking at the local town and considering/ accumulating evidence about what is good and also bad about it (i.e. including local resources, architecture etc). The students then produce a 'tree of ideas' representing what they would plan to do to improve the local area.

Doncaster Design Centre has devised the 'Settlement Game' for use with primary, secondary and special school students. The aim is to work with children in the creation and development of a physical model of a human settlement as it might have evolved in England over 2500 years. In the game a modelled situation is used to simulate the real development of communities. Students are presented with card (six by three metres) laid on the floor with a river, marshland and a path joining two points. After a presentation on Bronze Age settlements, the first group of students is asked to design and build a three-dimensional Bronze Age settlement. Students have a variety of resources to make the buildings and reference materials depicting buildings and settlements of the time. The emphasis is on working in teams and negotiating where things, for example vegetable patches or the communal hall, should be placed. The next group of students go through the same process but focusing on Anglo-Roman times. They then overlay their design of the town in the Anglo-Roman period on top of the Bronze Age settlement. The next group design a Saxon settlement, then a Tudor settlement, a Victorian settlement through to the modern day. Thus, the design of the town changes with the ages. The game has been evaluated by an educational specialist from Sheffield Hallam University who has investigated how the game can be developed and linked to different areas of the curriculum. The evaluation suggests that the game links to 80 per cent of subject areas and has huge potential in the National Curriculum, including mathematics, art and design, English, citizenship, geography, politics and

citizenship.

> *What we noticed was when we were playing the game with different cohorts of students it gets them talking to one each other and discussing and debating and thinking about their role in planning towns and how they interact with towns. It was really fascinating to see these young people developing personal skills and negotiation skills which was really strong* (Doncaster Design Centre Coordinator).

A manual has been written on how to deliver the settlement game and the educationalist from Sheffield Hallam is linking it to the National Curriculum.

Activities related to vocational and non-formal learning (i.e. family and out-of-school hours learning) were each cited by approximately half of built environment education providers as being areas to which their projects linked. Specifically:

- vocational learning – 24 interviewees
- family learning – 24 interviewees
- out of school hours learning – 21 interviewees.

Organisations stating that they provided vocational learning opportunities were spread across all three pilot regions (see Table 2.11). However, organisations in Yorkshire and the Humber were, proportionally, more likely than the other two regions to state that they offered vocational learning opportunities

Table 2.11 Vocational learning by region (number of respondents)

Region	Provider (N =24/44)
National	1
London	9
Yorkshire and the Humber	10
South East	4

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

Overall, the main types of vocational learning to which activities were linked were: the construction industry (including work experience, BTEC training); and leisure/travel and tourism GNVQs and NVQs. Individual interviewees also noted other examples of vocational learning. These included: young enterprise education; skills based sculpture courses; and craft training skills and education.

Figure 2.13 Examples of vocational learning

London-based **Our Hut**, runs vocational-related projects which have involved children and young people learning about architecture and the construction industry. The organisation arranged for a group to visit a construction site in order to see and learn about the industry. This is thought to help them make better informed career choices.

The Building Exploratory have run a day-long activity for secondary school students that focuses on the careers in the built environment (i.e. becoming architects, engineers, construction managers) and the different things that these occupations bring to a building or a place. This event is usually held at The Building Exploratory but the most recent one was held on a construction site and focused on the construction industry.

Figure 2.14 An example of family learning

Every month **Sutton House** runs a family day where they open up the whole house and provide arts and crafts activities, storytelling, games playing and early year's workshops. They also run after school clubs, most of which focus on the arts and history. Examples of work undertaken at these clubs include students looking at the house and then comparing it to their own homes and lives.

Finally, a number of interviewees (13) specified that their projects or activities were linked to additional subjects or learning areas. Subject areas identified by interviewees included: Latin; business studies; music; drama; 'A' level photography and archaeology; arts and crafts; architecture; and product design. Interviewees also identified PSHE-related activities, including the development of personal and negotiation skills and links with the ASDAN Certificate of Personal Effectiveness (COPE) qualification.

2.6 Length of education sessions and projects offered

Built environment education providers were asked how long a typical education project ran. Table 2.12 sets out their responses, highlighting the variability in length of education projects amongst providers. This variability was apparent in all three pilot regions and across the different sectors.

Table 2.12 Length of time a typical built environment education project lasted for (number of respondents)

Length of time	Provider (N =44)
Long-term (six months or more)	16
Medium-term (more than a week but less than six months)	12
Short-term (a week or less)	11
Daily	12
Sessional (a few hours but less than a day)	18
Variable depending on type of activity	16
Other	1

This was a multiple response question: interviewees could provide more than one response
Source: NFER interviews September 2006-January 2007

A number of interviewees (16) noted that the length of a project was dependent on the activity itself. For example, an organisation that offered site visits and experiences may work with children and young people on a sessional basis. However, the same organisation may well be engaged in a long-term project with a local school.

Where interviewees stated a time-focused activity, the most common response was that they provided sessional activities. However, nearly as many interviewees stated that they ran long-term projects (i.e. six months or more). Many of these interviewees highlighted the benefits of longer-term projects in developing student knowledge of the built environment. Figure 2.15 provides an example of a long-term project.

Figure 2.15 Long-term (i.e. six months or more) built environment education project

The **Serpentine Gallery's *Dis-Assembly*** project was a collaboration between the Gallery and North Westminster Community School; a large inner-city secondary school that was due to close and be replaced by two new Academies. Artists-in-residence were commissioned to work with students at the school to produce a range of work focused on the closure of the school and what it meant to them. The artists worked with classes of students during lessons (i.e. English, art and design). This project spanned the 2005/06 academic year and typically included students working with the artists at least once a week.

2.7 Funding sources

Direct providers of built environment education (including the 31 policy/strategy/managerial personnel interviewees where appropriate) were asked how the built environment education they provided was funded. Respondents were not required to provide details of the amount of funding they received.

2.7.1 Levels of funding

In the main, organisations received funding from a combination of national, regional and local funders. This was common across regions and also sectors. That said, however, organisations cited national funding most frequently, with approximately three-quarters detailing national funding sources (such as DCMS, Arts Council etc). Around a third of organisations also stated that they received regional (e.g. Regional Development Agency) and/or local level (e.g. LA) funding.

Figure 2.16 provides examples of organisations in receipt of national, regional and local level funding.

Figure 2.16 Examples of organisations accessing national, regional and local funding

Armley Mills, Leeds Industrial Museum receives funding via the region's Museum Renaissance Hub. They also access funding from the local authority and from the Big Lottery Fund.

Public Arts funding is dependent on which programme of work is currently running and the focus that it has. Examples of funders include: CABE; Yorkshire Forward; Arts Council; Wakefield Education department; and the Learning and Skills Council.

Planning Aid (London) receive core funding from London Council for the free advice service they provide to schools. The Department for Communities and Local Government also funds part of this advice service, in addition to some community-project work they undertake. Project work is also funded from a variety of sources, including European funding, community funds and Big Lottery Funding.

The main sources of national funding were:

- central government departments (such as, DCMS, DfES, DCLG and treasury funding)
- lottery funding (such as, the Heritage Lottery Fund and Big Lottery Fund)
- the Arts Council

- Learning Trusts and Foundations (such as, the Paul Hamlyn Foundation and the Esmee Fairburn Trust).

In addition, other national funders mentioned were: Architecture Centre Network; CABE; English Heritage; European funding; and Creative Partnerships.

At the regional level, funders highlighted included: Regional Development Agencies (SEEDA, Yorkshire Forward); Regional Excellence Clusters; and regional arms of organisations (such as Yorkshire Museums, Libraries and Archives Council). At the local level, the main funders were local authorities. This was supported by interviews with local authority advisors who stated that it was common for the local authority to fund locally-based projects. In addition to this, organisations also cited local firms (such as construction companies), schools and galleries.

2.7.2 Charging arrangements

Built environment providers and appropriate policy/strategy/managerial personnel were asked whether schools had to pay for their activities, programmes and resources and, if so, what were the charging arrangements.

Approximately a third of organisations (27 out of 75 providing built environment education) stated that schools paid for their services. Proportionally, these organisations were mainly from the South East. In addition, a high proportion of these organisations were from the historic environment sector (such as cathedrals and historical sites). The charges ranged from £2.00 to £4.00 per head. However, it is important to note that pricing levels might be dependent on a number of factors, including:

- the length of a visit (for example, Southwark Cathedral charged £2.40 per head for a half-day visit and £4.00 for a full-day)
- membership fees (for example, schools visiting National Trust properties can join the Education Group membership scheme. For this, schools pay an amount based on the number of pupils in the school, typically averaging out at £60.00 per school. The school can then visit any property free of charge)
- size of school group (for example, the De La Warr Pavilion charged £2.00 per head or £30.00 per visit, depending on whichever was cheaper)
- discounts for local schools (i.e. some organisations offered up to 25 per cent off the cost of the visit for local schools or local schools could visit free of charge)
- a nominal fee was charged which could be waived in particular circumstances (for example, Westminster Cathedral would not expect a school to pay if it could not afford to pay the charge)

- providing free visits but charging for particular activities (for example, Yorkshire Sculpture Park is free to walk around, but there is a charge for a workshop or activity).

2.8 Take-up by schools

2.8.1 Current take-up and level of interest from schools

Using a five-point scale, where one represented 'very poor' and five represented 'very good', respondents were asked to rate their perceptions of the current take-up/level of interest from schools in built environment education. Respondents could also indicate 'too variable to comment' and 'don't know', thereby allowing them to record their responses as accurately and validly as possible.

Table 2.13 The current take-up/level of interest from schools in built environment education

Current take-up/ level of interest	Provider	Policy/strategy/ manager	Local authority advisor
	(N)	(N)	(N)
Very poor	0	1	0
Poor	3	6	1
OK	6	2	1
Good	8	7	0
Very good	10	3	1
Too variable to comment	10	10	0
Don't know	5	10	3
No response	2	4	0
Total	**44**	**43**	**6**

Source: NFER interviews September 2006-January 2007

Overall, respondents most commonly stated that current take-up and level of interest from schools in built environment education was 'too variable to comment' or that they were unable to comment ('don't know'). For example, one interviewee stated that '*where it is good, it is very good, but there are many places* (i.e. schools) *that are not doing anything at all*'. Future research aimed at exploring the views of teachers on built environment education, planned in 2007, will address this issue more thoroughly and is likely to produce clearer findings.

When a rating on the current take-up/level of interest from schools in built environment education was provided, it was generally positive. For example,

one interviewee stated that: '*take-up is improving all the time, we have had lots of return visits from schools*'. Over half of providers gave a positive rating and only three gave a negative rating. Policy level staff were not as positive as the providers. A minority of interviewees (although more than a tenth) indicated that they thought the current take-up/level of interest from schools was poor. The two main reasons given by interviewees for their negative ratings are listed below:

- variation in the take-up and level of interest from schools (8 interviewees)
- lack of teacher understanding and confidence in built environment education (7 interviewees).

Interestingly, although health and safety issues related to taking students outside of the classroom were raised by some interviewees, they were not highlighted as a significant barrier to schools engaging with built environment education. In addition, issues surrounding transport costs and rural locations of schools did not emerge as significant barriers to schools' engagement. These issues will be examined in future research aimed at exploring teachers' perceptions and understandings of built environment education.

Variation in the take-up and level of interest from schools

Take-up and level of interest from schools was described by some respondents as '*patchy*'. It was thought that only a minority of schools really spent time focused on built environment education, whilst in a large number of schools it was seen as '*too much bother and too dangerous*'. This may link to a lack of teacher understanding and confidence as outlined below.

Lack of teacher understanding and confidence

Comments centred on a lack of comprehension of what constituted built environment education and a lack of training, experience and teacher confidence. It was suggested that many teachers did not know how to incorporate built environment education into the curriculum and were thus reluctant to do so. For example, a built environment education provider stated:

> *A lot of teachers are scared of the built environment. They say, 'we don't really know what to do'. But when you start discussing it, suddenly, the light bulbs turn on and they say, 'actually, we do a lot of this stuff already'.*

The interviewees who stated that they considered the current take-up and level of interest from schools to be 'good' or 'very good' were spread across the regions relatively evenly. In addition, interviewees representing museums and galleries; historic environment; and built environment sectors were among the

most positive in their ratings. Reasons given to support this positive outlook included:

- evidence of good take-up and levels of interest from schools (18 interviewees)
- increases in the provision of built environment education (five interviewees)
- benefits derived from topical initiatives such as the Learning Outside the Classroom Manifesto (LOtC) and Building Schools for the Future (two interviewees).

Evidence of good take-up and levels of interest from schools

The majority of interviewees drew on their own experiences to qualify this statement. Specifically, interviewees stated that their projects and workshops were fully booked in advance and that there appeared to be a tangible interest in the built environment education they offered. For example, Sutton House was reported to be booked up a year in advance, whilst other organisations noted that they ran at full capacity and had no difficulties in filling any of their opportunities. In addition, the representative from The Building Exploratory stated '*they* (schools) *can't get enough of it we don't have any problems filling any of our opportunities*'.

Increases in provision of built environment education

Interviewees, from different sectors and regions, stated that they considered built environment education to be an area growing in profile and interest, with one interviewee describing it as a ' *fledgling area*'. It was argued that more teachers were becoming aware of it and the ways in which it could be used within the curriculum '*especially in relation to the Academies and the new schools that are being built*'.

Benefits derived from topical initiatives

One interviewee thought that built environment education would benefit from current initiatives particularly learning outside the classroom. In addition, it was stated that initiatives such as Building Schools for the Future and the Primary Capital Programme meant that '*schools are now thinking about how they are going to influence this transformation of education and how they can contribute to the design spec, the output spec and the vision for education on that site*' (provider).

2.8.2 Ways in which take-up could be improved

Policy/strategy/managerial personnel were asked to specify any ways in which they thought take-up by schools could be improved further. Comments chiefly centred upon the following issues:

- training and CPD for teachers (12 interviewees)
- greater emphasis in the National Curriculum (12 interviewees)
- raising the profile of the built environment sector overall (8 interviewees)
- greater partnership working and networking (5 interviewees)
- more information and resources (5 interviewees)
- support for health and safety guidelines/risk assessment (4 interviewees).

Training and continuing professional development (CPD) for teachers

Comments focused on the need to provide more high-quality training related to learning outside the classroom and, specifically, built environment education. This included initial teacher training and also CPD for teachers. Interviewees argued that training would increase teacher confidence and develop their knowledge of built environment education. For example, '*if trainee teachers are given high quality training, provision and support, then it will inform everything they do*', thus making them more likely to incorporate built environment education into their teaching.

Greater emphasis in the National Curriculum

It was suggested, by provider and policy/strategy/managerial personnel, that if built environment education was made more explicit within the National Curriculum then teachers would be more inclined to incorporate it into their teaching practice. Indeed, one interviewee stated that policy advisers in the sector needed to '*make sure that it is absolutely tied in and ticks lots of different subject boxes*'. In addition, it was suggested that '*statements to the effect that it is seen as an integral part of the curriculum and not a bolt-on would help*'. However, the changes to the programme of study for history key stage 3 (GSCE history pilot) were considered to be positive steps forward as it was thought to offer more curriculum flexibility and '*huge opportunities*'.

Raising the profile of the built environment sector

In general, interviewees advocated the need to raise the sector's profile and also, specifically, teachers' knowledge and awareness of it. A number of ways were suggested including: increased marketing; positive coverage of built environment education in the media; '*tapping into the journals that teachers read*' (e.g. the TES); and the commissioning of further research that demonstrates the value of built environment education.

Greater partnership working and networking

Interviewees suggested that that there was a need to network and forge partnerships with other providers operating in the sector, thus producing a '*combined effort*'. However, interviewees also indicated that there needed to be more partnership working at the ground level, between schools and providers/specialists. It was reported that, where built environment education has been successful in the past, it had been where '*someone on the ground had been working with schools and developing expertise, resources and links/networks*'.

More information and resources

Here, interviewees argued that the level, quality and availability of information to teachers, regarding built environment education, needed to be increased. Some suggested greater web-based resources, whilst others indicated the need for more human resources (i.e. additional assistance) and warned that a website would not necessarily change behaviour and increase uptake of built environment education.

Support for health and safety guidelines

It was suggested that steps need to be made to '*remove teachers and schools fear of it* [school visits] *because there is considerable concern about if things go wrong*'. In addition, one interviewee stated that the built environment sector as a whole needs to '*get better at involving the media with positive messages about visits*'. The recently launched Learning Outside the Classroom (LOtC) Manifesto sets out the government's pledge to 'support schools, early years settings and local authority advisors to enable them to manage visits safely and efficiently' (DfES, 2006). Specifically, the government has pledged that it will keep safety-related paperwork to a minimum and produce clear guidance on keeping school students safe whilst on visits.

Finally, a range of more disparate suggestions to improve take-up by schools was also made by some policy/strategy/managerial personnel. These included: more funding for activities (3); increasing the accessibility of sites for teachers to visit (3); and the need for long-term, consistent learning, as opposed to incidental, short-term projects (2).

2.8.3 How schools find out about built environment education

In order to investigate the current way/s in which built environment education was promoted to schools and colleges, policy/strategy/managerial personnel

and local authority advisors were asked how schools found out about the provision they provided or what was available in the local authority. Table 2.14 shows the most commonly cited means by which built environment education was promoted to schools.

Table 2.14 Current ways built environment education was promoted to schools

Type of activity	Number of responses (N = 37)	Example
Promotional material	20	This activity included organisational newsletters and magazines, flyers and posters, mail-outs and websites.
Networks	8	This included partnerships and networks with other organisations, many of whom recommend the organisation to schools or educational professionals (e.g. involvement in Heritage Open Days).
Local authority	7	Promotion through the local authority was cited. Five of the six of the local authority advisors stated that their local authority was involved in highlighting built environment education opportunities/providers to schools and colleges. Furthermore, many stated that their specific role was concerned with the promotion and dissemination of built environment education with schools, including keeping schools up-to-date with activities currently available within the region.
Project work	5	A minority of interviewees stated that project and outreach work helped to promote future built environment education to schools. This direct contact encouraged future work with schools and promoted the organisation's future activities and projects (e.g. the school was aware of how the organisation worked and the opportunities that the projects could provide).

Open response questions
Source: NFER interviews September 2006-January 2007

2.9 Other issues raised

Interviewees were asked if they wished to provide further information on anything that might be of use and/or relevance to the *Engaging Places* project. In the main, comments were broadly similar across the three respondent types and across the three regions (i.e. there were no apparent issues associated with one particular region). It should be noted that interviewees often reiterated issues and concerns. The previous chapter has already referred to some of these issues. Comments typically focused upon the four issues listed below:

- Fragmentation (11 interviewees)
- Links to the curriculum (9 interviewees)
- Teacher awareness and knowledge of built environment education (8 interviewees)
- Issues with learning outside the classroom (LOtC) (5 interviewees).

Fragmentation

Respondents stressed the importance of '*joining things up*' and many advocated *Engaging Places* as a good medium for '*making the informal more formal*'. Interviewees noted that there were numerous built environment education initiatives and projects operating across the country but they lacked a strategic overview to tie them together. As a number of providers stated:

> *the Engaging Places project is very important (in joining things up) because there is this myriad of very small organisations'. In addition, 'the idea of joining up all these providers, rather than being a conflict of interest… is a real possibility for a fantastic jigsaw of opportunity.*

However, interviewees also warned that it was important not to replicate what was already out there as, for some, it could be another intervention on top of numerous others.

Links to the curriculum

Respondents, most of whom were policy, strategy or managerial personnel, commented on built environment education links to the curriculum. Specifically, interviewees stressed the importance of locating built environment education within a subject area so that teachers were able to clearly see its purpose. For example, geography was advocated as a key subject area for delivering built environment education in the curriculum. It was argued that it '*equips children and young people with the intellectual skills to investigate their local place and to then apply fieldwork skills to their local built environment*'. In addition, it was also proffered that '*making the connection between citizenship, pupil participation and building schools for the future was a real opportunity to develop student awareness of the built environment and its potential*'. Thus, although much of built environment education is regarded as cross-curricular (see Section 2.5 for further discussion) teachers still want to link it into a subject area and it is important for organisations to continue to do this.

Teacher awareness and knowledge of built environment education

The majority of comments focused upon the need to raise teachers' awareness of built environment education in terms of what it is and what they can do with it. Indeed, one local authority advisor stated that '*it is about teacher education as much as it is about children's education*'. In addition, it was argued that raising the profile of the built environment sector was '*crucial*' as many teachers were still unaware of what built environment education is, thus highlighting issues regarding definition. To illustrate, two interviewees were cautious about the term 'built environment education' and intimated that many teachers would rather refer to these activities as 'fieldwork' or 'education in the local area'.

Issues focusing on Learning Outside the Classroom (LOtC)

Comments focused on two areas. Firstly, a number of interviewees outlined the problems and issues that teachers faced when taking children and young people outside the classroom. For example, it was reported that for schools wanting to take their pupils to construction sites, the safety requirements were so stringent that it limited access and puts many off a potential visit. Other comments focused on the value of LOtC and built environment education specifically. Interviewees argued that LOtC added '*a huge dimension to the classroom*' and that unless built environment education was based outside of the classroom then '*it becomes abstract and it won't mean anything to anyone*'.

Other issues that were noted by interviewees included:

- the benefits of built environment education, such as its use as a medium when working with children and young people who have learning and writing difficulties or have English as an additional language (e.g. because of the use of maps and drawings etc)
- funding issues, including the lack of funding for built environment education projects and also the cost for schools to visit sites (e.g. transport costs etc)
- the quality and sustainability of built environment education projects. For example, it was proposed that projects should not be '*quick hits*' and also that some education officers do not know enough about teaching, thus affecting the quality of the built environment education experience offered. It is not known whether this comment was made in reference to one particular sector or built environment education generally
- the need to link the natural and the built environment together. One interviewee stated that '*there's a disconnection between the cultural environment and the natural environment and that in Britain we have a 'nature versus culture' split which isn't true in reality*'. As such, there is a need for *Engaging Places* to include the '*rural built environment dimension*' as well as the urban dimension in its focus

- the need to link the historical and contemporary built environment. It was proposed that it is more '*useful*' to refer to built environment as a whole, rather than dividing it between contemporary and heritage. Furthermore, it was argued that:

  > *Schools aren't concerned whether it's historic or contemporary. They are looking at using the built environment for different purposes and so there is a need to blur the edges between the two.*

3 Case studies

This section of the report presents nine case studies of built environment education providers (four examples from each region). The case studies and the rationale for their selection are detailed in Table 2.12. The case studies were identified by DCMS, in conjunction with the project steering group, from those organisations interviewed during the telephone survey.

The following sections are included in each of the case-study illustrations:

- details of who was interviewed
- background: an overview of the project or activities provided by the built environment education provider, including: the organisations and groups involved; project aims; activities; participants; duration of the project; sources of funding; and contact details
- further details of the project or activity focused on including curriculum links
- outcomes and impacts for participants including students, schools involved and providers
- benefits, challenges and lessons learnt from the project
- transferability and sustainability issues
- five key facts associated with the project.

The case studies draw on information gathered from telephone interviews carried out with built environment education providers, teachers, pupils and students.

Table 3.1 Case study selection

Region	Name of provider and type of built environment education	Sector	Rationale for selection as a case study
London	**1. Fundamental Architectural Inclusion**: local community/architect provider	Built environment	Good youth and community links; 2012 Olympics link; youth, community and public engagement in local regeneration.
	2. Sutton House: National Trust property	Historic environment	Inner city National Trust property that explores the present and the future through the past to address topical issues. Particular work with minority ethnic groups.
	3. Serpentine Gallery	Museums and galleries	Good link to the arts/good work with local schools e.g. DisAssembly Project. BSF outreach work in partnership with creative experts.
	4. Open House: architecture centre. Access to public buildings combined with teacher CPD and resources	Built environment	Well known, excellent links to schools and private sector. Exploring design quality issues.
South East	**5. Weald and Downland Open Air Museum**: site visits, different building types	Museums and galleries	Historical vernacular of building types and functions.
	6. Solent Centre for Architecture and Design: architecture centre. Curriculum & resource development & teacher professional development	Built environment	Curriculum focused/adaptable programme. Empowering teachers, providing resources, site visits, CPD, and skills workshops.
Yorkshire and the Humber	**7. English Heritage**: Rievaulx Abbey heritage site	Historic environment	Interesting work with local schools, providing opportunities for cross-curricular learning and sustainability, working with students with special needs.
	8. Doncaster Design Centre: architecture centre	Built environment	Engagement in the local community, involving pupils in design activities including designing school grounds. Interesting use of consultation and work with HE students.
	9. Creative Partnerships and arc: 'Shaping our Place'	Built environment	Interesting BSF links: working with pupils in Hull to look at the role architecture plays and the influence they can have on design in their city.

Case study 1: Fundamental Architectural Inclusion
Building Newham for 2012

Five key facts

Why? To provide information to students about the proposed changes to Newham's built environment in preparation for the 2012 Olympic Games and offered advice, guidance and support in relation to the progression and career opportunities within architecture and interior design, regeneration and planning and construction and surveying.

Outputs: Models and sketches of workshop activities.

Outcomes: At a student level, the project was considered to have increased student awareness of the local built environment and also the potential career opportunities and routes within the sector. More general impacts included enhanced team-working skills, communication skills, development of presentation skills and increased confidence. It also offered students the opportunity to work with, and meet, professionals working in the built environment sector. At the school level, the project encouraged and developed closer working relationships between the schools involved in the project and NewVic Sixth form College. It also provided schools with an opportunity to meet and forge links with architects and design professionals in their local area.

Benefits: The main benefits of the project was that it provided students with the opportunity to learn about the different aspects of built environment (such as architecture, regeneration and construction) and the potential opportunities within it. In addition, the project raised students' awareness of their local built environment and how the regeneration of the Newham area, in preparation for the 2012 Olympics, would change the landscape.

Lessons learnt: Schools wanting to highlight careers in built environment to their students may benefit from projects such as *Building Newham for 2012* as students are able to learn, in a very interactive way with professional architect and designers, about possible career routes within the sector. At a practitioner level, the project highlighted the need for a preparation and 'embedding' activity in the school before the actual event and the need for the individuals delivering the project to have professional expertise (i.e. professional architects) whilst also experience of working with students.

Telephone interviews were conducted with:

- A member of staff from Fundamental Architectural Inclusion involved in delivering the project
- The project commissioner from NewVic Sixth form college
- A Teacher from Brampton Manor School
- Fundamental Architectural Inclusion provided photographs of students working during the project (see CD).

Background

'Building Newham for 2012' ran in July 2006 and was a two-day event targeted at a group of Year 9 and 10 students from four Newham secondary schools. The event provided information to students about the proposed changes to Newham's built environment in preparation for the 2012 Olympic Games. The event also offered advice, guidance and support in relation to the progression and career opportunities within architecture and interior design, regeneration and planning and construction and surveying.

Organisations and groups involved:
- Fundamental Architectural Inclusion
- NewVic Sixth form College
- four Newham secondary schools including: Brampton Manor; Little Ilford; Plashet and Kingsford.

Project aims:
- To raise awareness and understanding of careers and progression opportunities and develop vocationally relevant skills in one of three areas: architecture and interior design; regeneration and planning; and construction and surveying. The event was also intended to develop team work, confidence and presentation skills and to reinforce the position of NewVic Sixth form College as an 'excellent post sixteen destination' for Newham students wishing to pursue careers and courses in the three areas.

Activities:
- On the first day, students experienced a carousel/taster of workshops in three areas: architecture and interior design; regeneration and planning; and construction and surveying.
- On the second day, students selected a workshop in one of the areas that they were most interested in from the first day. They then worked with tutors at NewVic Sixth form College and also professionals, including Fundamental Architectural Inclusion staff, undertaking project-related work. At the close of the day, there was an open exhibition where students presented their projects to the rest of the group and also to invited local professionals working in built environment and related industries (such as the architect of an aquarium planned for the area).

Participants:
- Students were recruited for the project mainly through the Newham Aimhigher gifted and talented networks.
- In total, fifty-four students from four secondary schools in Newham attended the event (key stages 3–4; ages 14–15).
- The project was not specifically linked to a curriculum area. Instead it focused on providing students with information to inform their career choices.

Duration:
- Two-day event in July 2006.

Funding:
- NewVic Sixth form College, Newham.

Contact details: Fundamental Architectural Inclusion / Tel: 020 8471 7929 / Email: mail@fundamental.uk.net / Website: www.fundamental.uk.net

The project

Day One of the event involved a carousel of hour-long workshops aimed at providing students with a 'taster' about careers and progression opportunities in three main areas: architecture and interior design; regeneration and planning; and construction and surveying.

- **Architecture and interior design**: this session, which was run by Fundamental Architectural Inclusion, begun with students discussing architecture, specifically that of the local community. Following this, students were engaged in an activity based on a 'live-brief' of a new visitor's centre that was currently planned in Newham. The students were provided with black and white photographs of the

area and were encouraged to sketch their ideas straight onto the photograph. Once the students had completed their final ideas they had to present and explain their design to the other students in the session.

- **Regeneration and planning**: a member of staff from Fundamental Architectural Inclusion also ran this session. Students were presented with a streetscape (panorama) image of Stratford high street and were required to plan and design new buildings to add to the streetscape and then present their ideas to the rest of the group.

- **Construction and surveying**: a member of staff from NewVic Sixth form College ran the construction session. This consisted of a range of construction-based activities involving marshmallows and spaghetti! This was intended to introduce the students to basic design principles and challenges.

The second half of the day involved a presentation to the students from a professional architect engaged in the design and build of a very large aquarium (biota) being built in the local area.

Day two of the event started with students selecting a workshop in one of the three areas that they had been most interested in from the first day. Working with staff from Fundamental Architectural Inclusion, NewVic Sixth form College and professionals (such as a project architect for an aquarium being built in the Newham), students undertook practical, project work. This included designing an aquarium and using Ordnance Survey maps to learn about, develop and construct a range of regeneration ideas in the Newham area. At the close of the day, there was an open exhibition where students presented their projects to the rest of the group and also to invited local professionals working in the built environment and related industries (for example, local councillors and architects designing and building new, 2012 Olympic-related structures in Newham).

Outcomes and impacts

Students

Overall, the feedback from students, teaching staff and professionals running the workshops was very positive. On the evaluation forms the students completed after the second day of the event, 90 per cent stated that they considered the workshop activities to be either ‘excellent’ or ‘good’. Specifically, the project was considered to have increased student awareness of their local built environment and also the potential career opportunities and routes within the sector (NewVic Project Commissioner). This is confirmed by student evaluations which showed that over three-quarters of students agreed that they had found more out about built environment career opportunities as a direct result of the workshops and activities. More general impacts on the students involved in the project included:

- development of team-working and communication skills through involvement in group-work activities
- development of presentation skills and increased confidence as a result of discussing and presenting their design ideas to their peers and built environment professionals.

The project offered students the opportunity to work with, and meet, professionals working in the built environment sector. For example, a project architect who had

designed and was managing the construction of a large aquarium in Newham worked with students on day two. The Project Commissioner from NewVic Sixth form College stated that this exposure to professionals in the sector would not have been possible without the '*input of Fundamental*' that provided the personal links and contacts.

School level

Due to the short term nature of the project (i.e. a two-day event) the impacts at a school level were thought to be minimal. However, the teacher from Brampton Manor School stated that the project encouraged and developed closer working relationships between the schools involved in the project and NewVic Sixth form College. For example, the teachers from the schools involved in the project were in close contact with the Project Commissioner at NewVic Sixth form regarding the event and the planned activities. In addition, the project provided schools with an opportunity to meet and forge links with architects and design professionals in their local area.

Gallery

The Project Commissioner from NewVic Sixth Form College stated that s/he believed staff from Fundamental Architectural Inclusion enjoyed working with a large group of students and s/he thought that they had learnt a great deal from the experience, such as tailoring the activities to the students. Project staff were evidently passionate about the project and believed that it had successfully introduced the students to built environment and the possible career opportunities with the sector.

Benefits and challenges and lessons learnt

Benefits

The main benefits of the project was that it provided students with the opportunity to learn about the different aspects of built environment (such as architecture, regeneration and construction) and the potential opportunities within it. In addition, the project raised students' awareness of their local built environment and how the regeneration of the Newham area, in preparation for the 2012 Olympics, would change the landscape. Specifically, students stated that they '*found out what was happening in the local area*' as a result of the project and that it '*gave us a good idea of how Newham will look in the future*'.

Challenges

The two main challenges discussed by interviewees related to practical issues, such as the venue being too small for the groups of students and being unable to control the room temperature so that it became very hot. However, the teacher did identify that sometimes the workshops were not '*pitched*' at the right level for students, resulting in some students getting bored and losing concentration. S/he reasoned that:

> *If you don't understand how our kids learn it can end up learning not really taking place. Although there were good activities there were some workshops that were quite passive and they* [the students] *were listening for ages and they got quite bored.*

Lessons learnt

Practitioners running projects:

- The key factors that were cited as being important to delivering this kind of project-work in the future included a preparation and 'embedding' activity in the school before the actual event. The teacher stated that the Newham 2012 project would have benefited from '*some kind of preparation thing in school about the event*'. S/he suggested '*maybe a lesson of work and with the college staff coming in to work more closely with our teachers*'.
- In addition, the Project Commission from NewVic Sixth form College stated that there is a need for the individuals delivering the project to have professional expertise (i.e. professional architects) and are also used to working with students.

How schools can engage with built environment education:

- The two-day event provided students with an opportunity to explore and experience careers within the built environment sector. It increased their awareness of their local built environment and the changes that the 2012 Olympics would make to the landscape. Schools wanting to highlight careers in the sector to their students may benefit from projects such as *Building Newham for 2012* as students were able to learn, in a very interactive way with professional architect and designers, about possible career routes within the sector.

What next

There are no current plans to repeat the project. However, Fundamental Architectural Inclusion, NewVic Sixth form College and Brampton Manor School would all be happy to be involved in a similar type of activity in the future.

Suggestions for project improvement and development included: more activity-based, hands-on work; possibly a site visit or experience to a building; a longer project (i.e. more than a couple of days); and something which is more cross-curricular in nature. In relation to the latter, the teacher from Brampton Manor School thought that future projects might link the built environment and modern foreign languages. S/he stated that:

> *So, the project isn't just about the professional that the Olympics are going to delivery in terms of structure, but maybe looking at languages. There is a big need for us in schools to promote that so something that we could link up a project cross-curricular…would be really interesting.*

Case study 2: Sutton House

Five key facts

Why? To provide pupils from multi-cultural backgrounds and heritages the opportunity to explore their family history within the context of an historic house full of local history.

Outputs: Learning programmes that are linked to strands 7 and 8 of the key stage 2 National Curriculum; pieces of artwork and book work produced during learning sessions and the after-school club (i.e. puppets; films; artwork).

Outcomes: Project work at Sutton House developed: an interest in history as a subject area; pupil confidence; an increased enhancement of pupil's interpersonal communication skills through working with pupils at the after-school club; and was felt to have had a positive impact on pupil behaviour.

Benefits: Learning about and exploring Sutton House allowed the pupils to think and understand their own cultural identity (for example, issues of displacement). In addition, the work at Sutton House allowed pupils to learn about history in an atmospheric situation, thus enhancing their interest in history and the built environment as a subject area.

Lessons learnt: Learning about and exploring Sutton House allowed pupils to think about and understand their own cultural identities. Other schools that have pupils/students who have experienced cultural displacement may benefit from the project work offered by Sutton House as it provided an opportunity for pupils/students to explore issues around identify and understand themselves in the context of spaces and places around them. Specific issues to consider in future projects of this nature include the need to have a clear purpose and learning outcomes that should be linked to the curriculum where possible. There is also a need for built environment education providers to retain an open dialogue with schools and groups. Thus, there is a need to find time to talk to teachers.

Telephone interviews were conducted with:

- The Learning Officer from Sutton House
- The Community Learning Officer from Sutton House
- A Primary Learning Mentor from Gayhurst Primary School
- A Pupil (aged 9) from Gayhurst Primary School.

Background

Sutton House, a National Trust property, is the oldest Tudor house in Hackney, East London. Built in 1535, the house has had a range of occupants including merchants, silk-weavers, clergymen and school teachers; many of whom had travelled from other countries and experienced issues of displacement. The house runs a formal and informal education programme. Both programmes aim to engage the local community with the history of the house and interpret it within the context of their own lives, backgrounds and experiences. This case study focuses on the formal learning programme and, specifically, the after-school club delivered at Sutton House.

Organisations and groups involved:
- Sutton House and Gayhurst Primary School. The rationale for selecting this school as part of the case study was that Sutton House and Gayhurst Primary had been working together for six years on a number of activities (such as Black History Month and an after-school club).

Project aims:
- The overall aim of Sutton House's formal learning programme is to encourage local people to visit the House.
- From Gayhurst Primary School's perspective, the aim of visits to Sutton House, including learning sessions and the after-school club, are to: broaden the experiences of pupils by taking them to an historic house they might not visit outside school hours; demonstrate to the pupils that history and buildings don't have to be boring; and encourage pupils to consider the history of the house and link it to their homes and experiences.
- The informal learning programme focuses on work in the community and aims to develop audiences that are not accessing the house. Staff at the house work with voluntary organisations, schools and community groups to deliver this work.

Activities:
- Sutton House's formal learning programme includes three sessions that map directly onto strands 7 and 8 in the history curriculum. These are: 'Life in Tudor Times'; 'Henry the VIII and his wives'; and 'Life in Victorian Times'. This programme of work also allows for more dedicated project work with schools, including after-school clubs.
- Pupils from Gayhurst Primary School regularly attend the after-school club. The activities undertaken at the club change every eight weeks but are always closely related to the history and art curriculum.
- The informal learning programme work focuses on more community-based project work. Activities have included working with schools for 'Refugee Week'.

Participants:
- The formal learning programme is designed for key stage 2 pupils.
- Predominantly it is Year 5 and 6 pupils from the Primary school who attend learning sessions or the after-school club at Sutton House.
- The informal learning programme has a wider remit and works with audiences who do not traditionally visit the house, including families, children and older people (55's or over).

Duration:
- The formal learning sessions are typically for two-hours. The after-school club runs for approximately eight weeks, with pupils meeting once a week for an hour and a half. Informal learning projects can vary in length, depending on the target audience and activity.

Funding:
- National Trust central funding; the after-school club has a nominal fee of 50p per week, per head.

Contact details: Sutton House / Tel: 020 8986 2264 / Email: suttonhouse@nationaltrust.org.uk / Website: www.nationaltrust.org.uk/main/w-vh/w-visits/w-findaplace/w-suttonhouse.htm

The project

Gayhurst Primary School has a multi-cultural catchment of pupils and families. As such, some pupils have experienced displacement, having moved to the area from other countries. The project work undertaken at Sutton House attempts to address some of the issues that cultural displacement presents for children, for example, issues around identity and understanding themselves in the context of spaces and

places around them. The after-school club provides the pupils with an opportunity to explore these issues, by using the history of the house to understand their own experiences. Activities undertaken at the club vary according to the current 'theme'. However, the work is typically linked to four key curriculum areas: history; art and design; citizenship; and personal, social and health development.

Outcomes and impacts

Pupils

The main way in which the formal learning programme, including the after-school club, impacted on pupils from Gayhurst Primary School was that it was felt to have nurtured and developed a genuine interest in history. The Learning Mentor from Gayhurst said that visits to Sutton House '*reawakened their* [pupil's] *interest*' in history. In addition, the Learning Officer from Sutton House stated that the learning provided at the house resulted in '*a sparkling of interests*' amongst pupils. He went on to add:

> *It can ignite interest within a class in a subject that before was just something they had to get through. If you tell them a story about Henry VIII, in an atmospheric space, they want to learn more*.

Thus, the value of learning within an historic built environment, outside of the classroom, has the potential to enhance learning and interest in a subject area (i.e. history in this instance). In addition to this, the Learning Mentor from Gayhurst Primary School believed that the pupils who attended the after-school club became more confident and enthusiastic and developed enhanced interpersonal communication skills. This, she believed, was a product of giving the pupils the time and space to investigate, contemplate and discuss their own lives within the context of an historic house that they could relate to (i.e. the lives of the former residents of the house, many of whom had also experienced displacement). More generally, the after-school club was thought to have had a positive impact on pupil behaviour. It was argued that the regular visits to the club reinforced positive behaviour as the pupils knew what was expected of them and also knew that if they were disrespectful or badly behaved, they would not attend the club again. Finally, discussions with a pupil from Gayhurst Primary School demonstrated that pupils clearly enjoyed their visits to Sutton House. S/he described how s/he learnt about the people that used to live in the house, including the ghosts, and also how s/he learnt to make puppets. These puppets have been used within classes at the school, specifically in relation to addressing issues of bullying.

School level

School staff from Gayhurst Primary School enjoyed the opportunity to visit an historic property that was so local to the school. The pupils visiting the house already knew the area and were able to relate to it very easily, therefore, supporting the learning process. This highlights the importance of locally based built environment provision to schools and the potential it has to engage pupils. In addition, Sutton House was also praised for the way in which it linked its learning programme directly into the National Curriculum. This has supported the school's rationale for including visits to the house on a regular basis. At a wider level, the Learning Mentor at Gayhurst Primary School considered Sutton House to have impacted on '*pupils' parents as well*'. She stated that, visiting the house with the school also encouraged them to visit with their parents at the weekend.

Sutton House

Learning staff at Sutton House understand the value of locating built environment education within curriculum subjects for teachers. Thus, the formal learning sessions currently on offer at the house link directly into strands 7 and 8 of the key stage 2 history curriculum. In addition, the staff at the house are experienced in delivering education programmes to pupils and appreciate the ways in which teaching should be delivered, so as to enhance learning. Specifically, the learning officer stated that the sessions are deliberately designed to keep '*adult-talking*' to a minimum and, instead, focus on pupil involvement. Thus, the programme includes '*a lot of role-play…a lot of enquiry-based learning, like object handling*'. This then '*puts the initiative on the children and gives them responsibility for how sessions go*'. Hence, participation and interaction are central elements of this example of built environment education.

Benefits and challenges and lessons learnt

Benefits

Learning and exploring an historic house allowed the pupils to think about and understand their own cultural identity. The pupils were able to '*process their experiences, so that they could move on'* (Community Learning Officer). This was advantageous for those pupils most affected by issues of displacement (i.e. refugees) as, for many of these pupils, '*they don't just have literacy or language barriers, but they also have emotional barriers'* (Community Learning Officer). In addition, the work at Sutton House allowed pupils to learn about history in an atmospheric situation, thus enhancing their interest in history and the built environment as a subject area.

Challenges

The only challenge identified by the Learning Mentor at Gayhurst Primary School related to the after-school club. She stated that one after-school club 'theme' was not as she had understood and '*went a bit off track'.* The club was not directly linking into the usual areas and instead focused on the pupils making objects and using music. As a result, the Learning Mentor expressed her concerns to the Learning Officer at Sutton House, who addressed the issue and made the 'theme' more relevant to the school's needs. Staff at Sutton House alluded to the challenge of funding, specifically when projects involved more informal, community learning. Core funding does not typically cover these projects and, thus, staff had to find funders for projects. This can sometimes limit the responsiveness, flexibility and also content of the projects offered.

Lessons learnt

Practitioners running projects:

- From a school and also a built environment provider perspective, the key lesson learnt through work of this nature was that the projects '*must always have a clear purpose*' (Learning Mentor).
- Staff at Sutton House considered it important to have '*open dialogue*' (Community Learning Officer) with schools and groups. Staff stressed the value of '*finding the time to talk to teachers*' (Learning Officer). S/he highlighted that there was a noticeable difference in the success of projects at the house when a teacher from a school conducted a visit to the house prior to the pupil visit. For these teachers,

the sessions were more fluid, as the teacher knew what to expect and was able to fit it into their lesson planning back in the classroom.

- The Learning Programme at Sutton House linked directly into strands 7 and 8 of the key stage 2 National Curriculum. This was praised by teachers from Gayhurst Primary School because it allowed the visit and activities undertaken during the visit to be clearly linked to the curriculum.

How schools can engage with built environment education:

- Learning about and exploring Sutton House allowed pupils to think about and understand their own cultural identities. Other schools that have pupils/students who have experienced cultural displacement may benefit from the project work offered by Sutton House as it provided an opportunity for pupils/students to explore issues around identify and understand themselves in the context of spaces and places around them.

What next?

Sutton House has immediate plans to develop its formal learning programme. The Learning Officer is currently developing a session on 'Elizabethan exploration'; a unit of work that will, again, mirror the key stage 2 history curriculum. Staff at the house perceived this direct link to the National Curriculum as key to the sustainability of the built environment education they offer. They felt that teachers will always visit the house if the learning can be readily linked to curriculum requirements. Gayhurst Primary School intend to continue their work with Sutton House, including pupil attendance at the after-school club.

The school was not able to suggest any ways in which Sutton House could improve and develop this type of project work. Indeed, it was argued that, so long as Sutton House kept '*evolving*' and being '*reactive'* to the needs of the school and the curriculum, then the provision would only improve. In addition, the pupil interviewee did not want to see anything change at Sutton House because s/he felt s/he would '*enjoy anything that they would put on*'. However, staff at Sutton House did see some room for improvement. Specifically, the Community Learning Officer stated that the organisation needed to adapt its teaching approach according to '*different learning styles*'. She warned about being '*too dictating*' in approach and saw the need to retain a fluidity in the development of learning programmes and also direct teaching style.

Case study 3: Serpentine Gallery *Dis*-Assembly Project

Five key facts

Why? To help manage the process of change for the whole school community facing circumstances of school closure.

Outputs: A publication which presents and analyses the results of the project and discusses its use as a model for commissioning artists in educational contexts, including those with a focus on the built environment; photographic material of students' perceptions of the closure of the school; architectural modular structures in the school grounds, providing new forms that the students could explore; films depicting life in an inner-city school and also the history of the school, including the change in architecture from 1855 to the present day; and a display of former students' photographs taken 14 years ago alongside present day photographs.

Outcomes: The project helped students understand and reflect on their own identities and that of their school and helped them cope with and address issues of change (i.e. the physical closure of the school). It also helped teachers manage the process of change and raised their expectations of the students' abilities via work in different spatial contexts and artistic mediums.

Benefits: Engaging with the built environment through the use of art allowed students time to examine and reflect on their experiences during this time of change and what the school meant to them. Many gained a greater awareness of themselves and their environment. In addition, using a range of artists to work in different ways with students maximised the outcomes.

Lessons learnt: The project provided a possible framework for how to engage with the built environment through the use of art. Other schools experiencing change might learn from the project and specifically consider how students are able, through engaging with their environment, to reflect on and articulate their experiences during times of change. Specific issues to consider in projects of this nature include: building in sufficient planning and investment time prior to project start-up; maintaining a high level of communication between the school and the organisation and developing good working relationships; doing things over a long period of time; and giving greater recognition to the non-academic curriculum.

Telephone interviews were conducted with:

- Head of Education from the Serpentine Gallery
- A member of staff from the Serpentine Gallery who worked on the project
- The former headteacher of North Westminster Community School
- The current headteacher of Westminster Academy
- A former pupil from North Westminster Community School
- The independent evaluator of the project.

Background

This was an arts project helping a school community engage with major upheaval and change to the school environment arising from the closure and new build. The project provided students with an opportunity to reflect on their own identity via the

built environment of the school and draw out the positive aspects, which could then be transferred to the new school environment and buildings.

Organisations and groups involved:
- The Serpentine Gallery
- North Westminster Community School (NWCS)
- Commissioned artists-in-residence, Faisal Abdu'Allah, Christian Boltanski, Runa Islam, architect Yona Friedman and Chocolate Films.
- The Gallery's rationale for artist selection was that they were professional, internationally recognised individuals considered able to meet the challenges of the project.

Project aims:
- The Serpentine Gallery and NWCS, including senior management and teaching staff, jointly discussed and specified the aims of the project, illustrating the strong sense of collaboration inherent within *Dis-assembly*. Specifically, the inter-related projects aimed to take the school site and use it as a base from which to produce art work and enable students to articulate their experiences of life in the school, the closure and new build. It was also intended to extend the experience of students in terms of education, beyond the formal curriculum.
- The school was keen to demonstrate to the students what an important period in education they were going through and also to maintain morale and self-esteem during the closure, helping students to identify and transfer positive aspects of the closure to the new school environment.

Activities:
- *Dis-assembly* ran in the 2005/06 academic year at this large inner-city secondary school that was due to close and be replaced by two new Academies. The Serpentine Gallery commissioned artists-in-residence to work with students at the school to produce a range of work focused on the closure of the school and what it meant to them.
- The majority of the project was undertaken during specific subject lessons (i.e. art and design, citizenship, English and history). However, students also worked with the artists in free periods (sixth-formers), after school and during lunchtimes. One student used the pieces of work she produced during the project as an element of her 'A' Level art and design coursework.

Participants:
- Approximately 1,588 students from NWCS (key stages 3–5; ages 11–18). Specifically: Faisal Abdu'Allah worked with:

  - three Year 10 art and design classes
  - eight Year 10 citizenship
  - two Year 8 art and design classes
  - sixth formers.

- Chocolate Films worked with ten Year 8 classes; Runa Islam worked with sixth formers and Year 10 students; and Yona Friedman worked with students from Years 7, 8 and 9.

Duration:
- Four–year collaboration between the Serpentine Gallery and NWCS. The initial two-years comprised of planning and preparation; the third year saw the Gallery introducing the artists to the school and the students through workshops and events; and the final year involved direct, practical delivery of *Dis-assembly*.

Costs:
- Total cost of the project was £125,000.

Funding:
- Heritage Lottery Fund; the John Lyons Charity; and Arts Council England.

Project evaluation:

- The project was evaluated by an independent external evaluator.

Contact details: Serpentine Gallery / Tel: 020 7402 6075 / Email: information@serpentinegallery.org / Website: www.serpentinegallery.org

The project

NWCS student catchment was diverse and included many students from refugee and asylum seeker communities. This created a '*politicised and socially aware culture within the school*' (Former Headteacher of NWCS). For many students the school closure was particularly challenging because the school provided a key source of stability within their lives. The project work undertaken included a range of activities that focused, to varying degrees, on the built environment and the issue of the school closure. These specifically included:

- Faisal Abdudu'Allah worked with students (classes from Year 8, 10 and the sixth form) for two days a week for a year to produce photographic material that depicted the students' perceptions of the school closure and wider political issues, such as the diverse community of the school. This work focused on student identity and sense of place and revealed the 'history and architecture that were in place' (Serpentine Gallery Staff) at the time of the school closure.
- Yona Freidman worked with Year 7, 8 and 9 in the school grounds to construct 'irregular structures' out of basic materials. This was intended to be a hands-on building experience. He also worked with students to create modular components that were fixed to fences and hung over the playground, creating new forms that the students could enjoy. Finally, posters which had a series of urban designs on were put on walls to produce shapes and patterns.
- Chocolate Films produced a short animated film, in conjunction with ten classes of Year 8 students, based on the history of the school. This included charting the change in the school buildings from 1855 to the present day.
- Christian Boltanski, who had taken school photographs of 114 students 14 years earlier, returned to the school, retraced each of the former students and retook their photographs. This provided a visual depiction of the school's history, which was displayed at the school and in the Lisson Gallery. This provided a way of linking the school's past with the present and also the future.
- Runa Islam produced a film. She interviewed students from Year 10 and the sixth form and developed a script through workshops. The film was shot over a two-week period, on the school site, with students assuming the key roles. It depicted life in an inner-city secondary school and provided a space for students to mark this particular change in their lives and the history of the school.

The project focused on the school closure as an issue. However, there were links to specific subjects. It was through these subject lessons that much of the project work was undertaken. Curriculum areas included: Art and design; citizenship, English history.

Outcomes and impacts

Students

The impacts on students were diverse and for some, profound, with one student describing the project as a '*rite of passage*'. The former headteacher at NWCS stated that the project took students to a '*whole other realm of understanding culture, education and themselves*' beyond what was delivered through the National

Curriculum. In addition, the project was seen as providing students with a space and context to articulate their opinions, specifically in relation to the school closure and the changes that were going on around them. In relation to personal/skill development, students were reported to have benefited in the following ways:

- increased confidence and sense of their own personal identity (i.e. in relation to how they understood and situated themselves in the context of the school closure and the new build)
- improved inter-personal and communication skills, including collaborative working and peer learning (i.e. their ability to articulate their thoughts and feelings about what the school space meant to them)
- enhanced critical and reflective thinking skills (i.e. reflecting on how the spaces around them impacted on them)
- improved self-esteem, aspirations and a sense of what they could achieve (i.e. raising students' aspirations that they could be film makers, artists etc.).

School level

The impacts and outcomes at the school level were important but also unique to the school situation in terms of its closure and the new build. It was believed that the project enabled teachers to develop better relationships with their students and, through observing the artists at work, learnt how to communicate more effectively with them (Student). It was also reported that the project enabled teachers and students to remain excited and positive about the school during a state of extreme flux, whilst also influencing and changing some teachers' perceptions of the capabilities of their students (Former Headteacher of NWCS).

Gallery

The former headteacher of the school also felt that the Gallery staff involved in the project '*enjoyed freeing-up the students' talents*'. Project staff themselves commented on their passion for the project and also the fact that it raised the profile and importance of the education strand in the Gallery, setting out what their objectives were and what they could achieve. In addition, the products (such as photographs and films) produced by students during the project allowed '*a particular social, educational and cultural moment in the UK*' (Evaluator) to be documented and remembered.

Benefits and challenges and lessons learnt

Benefits

The main benefit of engaging with the built environment through the use of art in this project was that it allowed students the time to examine the '*physical, political, social and educational context in which they worked, and to articulate their thoughts and feelings about what the school meant to them*' (Evaluator). Thus, it allowed them time to consider the space around them and draw out the positive aspects of the school closure which could be transferred to the new school environment and buildings. Specifically, the project was able to tap into the students' creative and artistic potential and nurture transferable skills. In addition, the project was valuable because of its innovative and unusual way of commissioning different artists-in-residence to work with students. Indeed, the evaluator of the project described *Dis-assembly* as a demonstration of '*how a process of creative collaborative inquiry can truly enlist participants in a school of thought*'. Finally, a student stated that the extent of media

coverage of the project was also a key benefit for him/her personally because of the positive portrayal of the school.

Challenges

It was argued that, due to the school's closure, '*challenge was an inherent part of the project*' from the outset (Serpentine Gallery staff). However, one challenge identified by the students was that some of them became tired of the project towards the end, mainly because it had been so intensive. From a teacher and school perspective, the main challenges focused on finding the time for students to be involved in the project and the bureaucracy associated with bringing outside agencies and partners in to work with young people (i.e. CRB checks and paper-work). Finally, the evaluator of the project identified three additional challenges that the project faced. These were:

- that teachers wanted the project to be curriculum-focused despite the artists' and Gallery's aim that it was not to be linked to any area specifically and was, instead, to be focused on the students' understanding and perceptions of the school closure and the new build as an issue
- the Gallery staff remaining 'project-focused' and not 'rail-roaded' into the issues that the school faced
- the artists and school recognising that some students were not interested in the project or what it sought to achieve.

Lessons learnt

Practitioners running projects:

- Gallery staff and the local evaluator noted a number of specific issues that they considered important to in projects of this nature. These included:
    - building in sufficient planning and investment time prior to project start-up
    - maintaining a high level of communication between the school and organisation and developing good working relationships
    - working from a top-down approach (i.e. inform governors, senior management first)
    - doing things over a long period of time
    - recognising the characteristics of the school and knowing how the organisation can help
    - recognising that '*there is a curriculum outside the normal academic curriculum which can influence the students immensely*' (Former Headteacher of NWCS).

How schools can engage with built environment education:

- The project provided a possible framework for how to engage with the built environment through the use of art. Other schools experiencing change (for example, closure or amalgamation) might learn from the project and specifically consider how students are able, through engaging with their environment, to reflect on and articulate their experiences during this time of great change.

What next?

The Gallery has plans to continue its work in this area and undertake projects of a similar nature in the future. At present, the Gallery is in the process of developing more sustained, longer-term relationships with schools and is trying to '*exploit new opportunities that the curriculum can offer*' (Serpentine Gallery staff). It is also encouraging the two Academies that replaced NWCS to continue the work of the *Dis-assembly* project and take it forward. Meetings are planned in the spring (2007), to discuss how the Gallery and the Academies can strategically work together and build on the project.

Suggestions to improve and develop this type of project and other built environment education projects included: the need to develop partnerships before the project between the school and organisation involved; the need to have a way of disseminating the project and its outcomes (*Dis-assembly* produced a high quality publication which contained a wide range of photographs depicting students' work and completed installations[1] and a video); the benefits of external evaluation; and encouraging long-term projects (i.e. between six months to more than a year). In addition, the former headteacher of NWCS stated that the work that was undertaken with Year 7, 8 and 9 students, involving the development of 'irregular structures' from basic materials in the school grounds, could be used as a strand in the future curriculum.

[1] *Dis-assembly*. Serpentine Gallery (2006) http://www.serpentinegallery.org/2006/10/disassembly.html

Case study 4: Open House

Open Up!

Five key facts

Why? To provide secondary students with an opportunity to experience contemporary architecture and, with support from architects and design professionals, use their experiences to respond to a design brief.

Outputs: Sketches, photographs and design ideas from the building visit; conceptual and practical work related to the design brief were presented to students in school; and a model of a CD storage unit that represents the student response to a design brief prepared by teachers and architects.

Outcomes: At a student level, the project nurtured and developed the creative potential of students. It helped develop design-specific skills and general organisational abilities whilst also encouraging students to consider built environment career choices and opportunities. At a school level, the main outcome of the project was that it promoted built environment education within the curriculum, specifically within design and technology. It also increased teacher confidence in the use of built environment education and raised teachers' expectations of students and the quality of work they could produce. Finally, for the architects, the project developed their understanding of client needs and also developed their understanding of learning spaces and the needs of learners. In addition, the users of the buildings that the students and schools visited developed a greater understanding of the potential of their building as a learning resource.

Benefits: From a school perspective, the main benefits were that students were able to learn outside of the classroom and off the school site and were able to benefit from working with professional architects and designers. Students considered the project to be '*fun and interesting*' whilst also helping them to complete their coursework. From an organisational perspective, the project allowed an opportunity to '*develop a greater understanding of different audiences*' and consider ways of working with them. It also allowed Open House to explore how this learning and practice could be embedded into the school curriculum.

Lessons learnt: Other schools wanting to incorporate built environment education into the curriculum on an annual basis should consider projects like Open Up! The project provided an opportunity for built environment education to be promoted within the school curriculum and for students to experience contemporary architecture as well as engage directly in the design process. Work with architects and design professionals during this process increased student awareness of the built environment and the potential careers within it. At a practitioner level, the Open Up! project highlighted the need for training and preparation when delivering this type of work. Architects need to be trained in delivering built environment education and need to plan and prepare their project work prior to engaging with the students. Other issues to consider when delivering this type of project included: the development of good working relationships between the organisation and architects/design professional operating in the sector; accessing appropriate sources of funding; adequate staffing; and teachers who are committed and interested in built environment education.

Telephone interviews were conducted with:

- The Head of Formal Learning from Open House
- A teacher from Newstead Wood School for Girls
- Two students (aged 15 and 16) from Newstead Wood School for Girls

- Open House provided photographs depicting the students working in the Open Up! project (see CD).

Background

Open House is an organisation which aims to promote a better understanding of architecture and the public environment across all sections of the community. Open Up! is an annual design skills programme for secondary school students. It provides an opportunity for students to experience contemporary architecture and, with support from architects and design professionals, use their experiences to respond to a design brief.

Organisations and groups involved:
- Open House
- Architects and design professionals
- Newstead Wood School for Girls.
- The rationale for selecting this school as part of the case study was that it has worked with Open House for many years and has a strong focus on architecture and the built environment within the curriculum.

Project aims:
- The Open Up! programme has four primary aims: the provision of direct experience to students (such as visits to buildings); the development of 'a vocabulary to help students express and engage with their built environment' (such as understanding measurements and also conceptual notions of architecture); student involvement in the design process (such as responding to a design brief); and increasing student awareness of the built environment and potential careers within it.

Activities:
- Students visit a building in London and work with architects and a representative from the building to explore and record the architecture and designs of the structure. The students then return to their school and are presented with a design brief (such as designing a CD storage unit) and use the sketches and ideas they recorded from the building visit as inspiration for their designs. Architects work with students in workshop sessions and offer advice and support to students during the design and construction process. Finally, there is a competition and award ceremony in which students' project work is judged.

Participants:
- Secondary schools in London (key stages 3–4; ages 11–16).
- Newstead Wood School for Girls involve its Year 10 design and technology students in the programme.

Duration:
- Open Up! is an annual programme. It runs from January to April each year.

Funding:
- Corporate funding (UBS Investment Bank is the sponsor for 2007)

Contact details: Open House / Tel: 020 7383 5722 / Email: aen@openhouse.org.uk / Website: www.londonopenhouse.org

The project

The project, which runs from January to April each year, involves three main stages. Firstly, students visit a building in London, which is an example of contemporary architecture. During these visits, students work with architects (typically the one who

has designed the building) and a building representative to explore and record, through sketches and photographs, the building. The second stage of the project involves the students returning to their school and being presented with a design brief that they have to respond to (such as designing and constructing a CD storage unit). Architects continue to work with students in workshop sessions and offer advice and support to students during the design and construction process. These workshops typically occur in either design and technology or art and design lessons, although students can work on their models in their own free time if they wish. Finally, there is a competition and award ceremony in which the students' project work is judged. The aim of this event is to celebrate the students' achievements. Training is provided to teachers (about the project) and architects (about delivering built environment education to students) alongside the work with students.

Outcomes and impacts

Students

One impact reported by all interviewees was that the project nurtured and developed the creative potential of students involved in Open Up! Indeed, the teacher from Newstead Wood School for Girls stated that the project gave students '*more stimuli, so basically, they came up with more creative ideas*'. This was also echoed further in the comments from the two students interviewed. Both stated that the project allowed them to learn from other architects and designers and use their ideas as inspiration to develop their own, individual designs:

> *It taught me to look outside the box. When I sketched out some ideas, they were all ones that I had seen already, rather than my own. It* [the project] *helped me to think of new ways.*

> *I learnt a lot about different designs and how you can use other people's inspiration but adapt it to your own style.*

Students were also reported to have developed a range of skills as a result of the project. These included the development of design-specific skills such as a '*vocabulary to help students express and engage with their built environment*' (Open House staff). This related to learning about scales, measurements, evaluations and manufacturing plans which outline how the model is intended to be built (Students). In addition, one student highlighted that the project developed his/her organisational skills because the project had '*certain deadlines that we had to meet for aspects of the project*'. Finally, Open Up! also impacted on student career choices and opportunities specifically related to the built environment. The Head of Formal Learning from Open House stated that the project was about '*opening students up to potential careers*' and the teacher from Newstead Wood School for Girls confirmed that the project had generally raised students' awareness of careers in design and the built environment. The direct work with architects and design professionals provided students with a link to the sector, with many students enquiring about work experience opportunities at architectural practices. In addition, both students interviewed stated that, as a result of the project, they were considering future careers in design, with one hoping to become an architect:

> *It* [the project] *has led me to think that I want to do a career in design because I like that you can put your individual style on things instead of having to do something out of a textbook.*

School level

From a school perspective, the main outcome of the Open Up! project was that it promoted built environment education within the curriculum, specifically within design and technology. In addition, the third prize award that the school won also '*boosted morale*' (Teacher) and raised the profile of built environment education within the school further. The project was also reported to have increased school staff confidence in the use of built environment education. Indeed, the teacher from the school stated that, if other opportunities involving architecture arose, then s/he would try and become involved because of the success of the Open Up! project. Finally, students from the school believed that the project had raised teacher expectations of students, such as the quality of student work. One student stated that s/he thought the teachers were '*quite surprised with how well the students adapted to the project*'.

Open House staff, architects and building users

One key impact of Open Up! for architects involved in project delivery was that it developed their understanding of client needs within the education sector. The Head of Formal Learning at Open House highlighted the value of the experience for architects, particularly in relation to Building Schools for the Future:

> *With the Building Schools for the Future programme being so pertinent today a lot of architects are really interested in getting a greater understanding of learning spaces and the needs of learners.*

In addition, it was proposed that the architects found working with the students '*enormously valuable*' (Open House staff) because:

> *Young people can really expand notions of design concepts as they don't come with the baggage of decades of experience in architectural practice.*

Finally, the users of the buildings that the students and schools visited were also considered to be positively affected by the project. It was thought that these individuals '*developed a greater understanding of the potential of their building as a learning resource*'. Thus, the project allowed them to think about and consider the building in which they worked and the affect that the building design had on them (e.g. their working spaces and layout of the building).

Benefits and challenges and lessons learnt

Benefits

From a school perspective, the main benefit of Open Up! was that it allowed students to learn outside of the classroom and off the school site. In addition, the teacher considered the students to benefit from working with professional architects and designers. Indeed, the fact that students were critically evaluated by these professionals was '*really excellent in itself*' (Teacher) and enabled students to gain from their expertise. In addition, students considered the project to be '*fun and interesting*' whilst also helping them to complete their coursework.

From an organisational perspective, the project allowed Open House an opportunity to '*develop a greater understanding of different audiences*' and consider ways of working with them. It also allowed Open House to explore the means by which this type of learning and practice could be embedded into the school curriculum so that architecture becomes a formal element of the National Curriculum.

Challenges

In terms of challenges, staff and students from the school identified a number of project specific issues, namely: that the deadline of the competition was too tight and that, as a result, some students entered part-finished work; and that the communication from Open House was sometimes a little '*last minute*' (Teacher).

Staff from Open House noted a number of challenges posed during the project. Firstly, the issue of schools dropping out of the project for various reasons such as unexpected school closures or unscheduled busy teacher workloads. It was noted that this had an '*explosive effect*' on the rest of the project because it involved cancelling visits to buildings and architects planned to work with the school. This sometimes tarnished future working relationships as these architects were working on the project through goodwill. Other challenges noted included:

- funding: there was no core project funding available which meant that Open House had to access funding for the project each year
- identification of new audiences: the challenge of encouraging schools to work with an organisation outside their own borough and visit buildings across London. It was explained that many London schools do not leave their boroughs when participating in learning outside the classroom
- learning outside the classroom: the general issues and challenges posed by taking students outside of the classroom (such as risk assessments and paper work).

Lessons learnt

Practitioners running projects:

- Open House staff described a number of key lessons learnt from delivering this type of work. Firstly, there is the need for sufficient training and preparation. Architects need to be trained so that they have the resources and skills needed to deliver built environment education to students. In addition, it is important for architects to visit the building prior to the school visit, in order to work with the building representative to plan the activities for the visit. It was argued that:

  > *Architects are not educators but we are asking them to lead powerful learning experiences. We need to be able to equip them with the tools for that and not expect them to be teachers but architects providing deep learning.*

- There is the need to develop and nurture good working relationships between the organisation and architects/design professionals working in the sector.
- It is important to be able to access appropriate sources of funding and the need for adequate staffing resources, including volunteers, who provide hands-on support during the schools' building visits, were cited.
- The value of having teachers who were committed and interested in built environment education because 'the architects are fantastic but it is up to the teacher to interpret it' (Teacher).

How schools can engage with built environment education:

- Other schools wanting to incorporate built environment education into the curriculum on an annual basis should consider projects like Open Up!. The project provided an opportunity for built environment education to be promoted within the school curriculum and for students to experience contemporary

architecture as well as engage directly in the design process. Work with architects and design professionals during this process increased student awareness of the built environment and the potential careers within it.

What next?

The Open House formal learning programme has been in operation for approximately six years. As such, the organisation is currently reviewing and planning projects and, thus, staff were not able to provide definite plans for the future. However, it was suggested that the organisation may attempt to re-instigate the Architect Education Network. This was a group made up of teachers and architects which aimed to develop training opportunities in built environment education.

Teachers and students found it difficult to make suggestions for improvement or development. However, the two students interviewed did suggest that Open Up! projects in the future may benefit from students visiting more than one building during the school visit (such as an art gallery), to allow for comparison. In addition, they wanted to see more group work, possibly looking at the structure of buildings and/or focus on a Cityscape looking specifically at how buildings ‘fit’ together.

Case study 5: Weald and Downland Open Air Museum

Five key facts

Why? To provide visiting schools with a '*taster experience of a particular period in history*' (Education Manager), through role play, costume dress, object handling, demonstrations, hands-on activities and interaction with the historic built environment.

Outputs: A schools' programme that links to history, science, mathematics and art and design; pieces of work and book work produced during workshops (for example, drawings of Tudor buildings).

Outcomes: Project work at Weald and Downland Open Air Museum allowed pupils to be actively engaged with historical artefacts and buildings. In addition, pupils benefited from an increased awareness of their built environment and were able to see links between past and modern day built environments.

Benefits: The Tudor workshop at Weald and Downland Open Air Museum '*extended the pupils learning*' (teacher) and allowed them to experience activities that would not have been possible in the school environment. Thus, learning within an historic built environment enriched the learning experience for pupils.

Lessons learnt: Schools wanting to complement classroom-based curriculum work with Learning Outside the Classroom should consider built environment providers like Weald and Downland Open Air Museum. Specifically, the workshops offered by the museum allowed pupils to consider what Tudor life was like, including the main aspects of domestic and rural life. This enabled the pupils to understand and appreciate the past built environment and consider its place in today's built environment. In addition, a number of key factors were cited as being essential to delivering this kind of project work in the future. Interviewees highlighted the benefits of pupils working in small groups to allow opportunities for more focused learning. Secondly, each pupil in a school party should experience all workshops run on the day as opposed to only experiencing some. Finally, it was felt that providers should incorporate 'hands-on' opportunities where possible, such as handling artefacts or more craft-based workshops.

Telephone interviews were conducted with:

- The Education Manager at Weald and Downland Open Air Museum
- A teacher from Shottermill Junior School
- A pupil from Shottermill Junior School – the pupil completed a paper copy of the interview instead of a taking part in a telephone interview.

Background

Weald and Downland Open Air Museum is set in 50 acres of countryside and has a collection of nearly 50 historic buildings dating from the thirteenth to the nineteenth century. The buildings have been conserved and rebuilt in their original form and provide an opportunity for visitors to experience what it would have been like to live in the buildings and to learn how they were used by their historic occupants. There are a range of daily activities that visitors can see at the museum. Most activities are run by demonstrators and tour guides. This includes the museum's Downland Gridshell, an award winning unique lightweight structure made of oak laths, which provides a space for workshop activities and collections. Housed in the Gridshell is a collection of over 10,000 artefacts from historic rural life. There are also guided tours that describe how the Gridshell structure was built and demonstrations of rural trades and crafts, such as brick making and stone carving.

Organisation and groups involved:
- Weald and Downland Open Air Museum
- Shottermill Junior School
- The rationale for selecting this school as part of the case study was that, until recently, the junior school had not used the museum, despite it being nearby. The school has recently visited the museum on two occasions and taken part in Tudor workshops and candle-making sessions. These visits were arranged after the teacher personally visited the museum and thought that it would be an ideal learning opportunity for his/her pupils.

Project aims:
- The museum aims to provide visiting schools with an experience of a particular period in history. This is achieved through role play, costume dress, object handling, demonstrations (such as rural trades and crafts like brick making and stone carving) and hands-on activities (for example, the Witley Joinery shop has a practical hands-on display that allows pupils to explore building materials and construction methods).
- The museum's school service aims to provide educational programmes that are relevant to all age groups and that are cross-curricular.

Activities:
- The museum has a dedicated schools' service, which provides workshops for visiting schools. Although the workshops are intended to be cross-curricular they do link directly into history, mathematics, science and art and design. The workshops can also be adapted according to key stage, thus they are tailored to the individual needs of the school and teacher. Examples of museum-led workshops offered to schools include:

  - 'Life on a Tudor farmstead' – pupils engage with the farmstead and associated buildings and contents through activities, all of which illustrate what domestic and rural life would have been like in the Tudor period
  - 'Building materials' – activities, some of which are hands-on, explain an aspect of building construction such as timber framing and room use
  - 'Shelter buildings' – reconstructed buildings on the museum's site are used to explain and illustrate the design process from basic shelters to oak-framed buildings.

- The schools' service also offers a range of half-term holiday activities and provides a series of activity sheets which are available to download from the website. The activity sheets include a variety of different topics, for example: shapes in buildings; mathematics in buildings; and proportions and patterns in buildings.

Participants:
- The schools' service provides educational activities mainly for pupils in key stages 2 and 3. However, the museum does also work with older students and has recently worked with 'A' level students looking at the application of mathematics in the buildings on the site.
- Year 5 pupils from Shottermill Junior School were involved in activities at the museum.

Duration:
- The museum runs day-long workshops; one-off activity days focused on specific issues (for example, looking at sustainable schools); and specific projects that can vary in length.
- Pupils from Shottermill Junior School have attended two, day-led museum workshops.

Funding:
- The museum is a charitable trust and generates funding through visitors' fees and revenue from the gift shop. It also receives small grants and has a body of 'friends' of the museum who fundraise on its behalf.
- Parents of pupils at Shottermill Junior School funded the pupil visits themselves. The cost per child totalled £11.50 and included transportation costs and entrance to the museum.

Contact details: Weald and Downland Open Air Museum / Tel: 01243 811363 / Email: education@wealddown.co.uk / Website: www.wealddown.co.uk/home-page-english.htm

The project

Pupils at Shottermill Junior School attended a Tudor workshop. This visit was to complement the Tudor scheme of work the pupils were studying at school. The workshops provided by the project linked directly into the curriculum, which was history in this instance, and provided pupils with the opportunity to take their learning out of the classroom into an historic built environment setting. The workshops brought the work they were studying '*to life*' (Education Manager) as it allowed the pupils to consider what Tudor life was like, including the main aspects of domestic and rural life. The historic buildings on the museum site were used to illustrate what types of activities were undertaken in the Tudor period and how the buildings were used in the past. This enabled the pupils to understand and appreciate the past built environment and consider its place in today's built environment. Indeed, the teacher from Shottermill Junior School stated that a number of the pupils who attended the workshops recognised that their own homes were Tudor in style.

Outcomes and impacts

Pupils

The most positive impact on pupils visiting the museum was the ability for them to have a '*hands-on experience*' (teacher). It was argued that the workshops allowed the pupils to be actively engaged with the historical artefacts and buildings and engage in activities that would not have been possible in the confines and limitations of the school (i.e. where there were no artefacts to illustrate and learn from). In addition, the teacher at Shottermill Junior School reported that pupils generally benefited from an increased awareness of their built environment, such as being able to identify their houses as being Tudor. It was felt that the historic buildings on the museum's site enriched the learning experience of the pupils and allowed them to interact with the past in a real way. For example, pupils were able to take part in activities in the buildings, helping them to appreciate life in Tudor times. Finally, there was a real sense of pupil enjoyment of the workshops, with the pupil interviewee stating s/he '*loved seeing the Tudor buildings and drawing them*'.

School level

As a result of his/her visits to the museum the teacher from Shottermill Junior School intends to take her class there every year and incorporate the visit into the history curriculum. S/he valued the '*added dimension*' that the historic buildings and also learning outside the classroom brought to the Tudor scheme of work. In addition, the relevance of the workshop to the history curriculum made the visit easier to plan and also to undertake as the teacher knew that it would be directly applicable to the National Curriculum. At present, however, this teacher is the only member of staff from the school who has visited the museum. S/he is actively recommending the museum to his/her colleagues and believes that other year groups in the school would benefit from visits. The museum also works closely with two other local primary schools. To encourage local schools to visit, the museum offers them free entry at any time of the year. This was described as '*giving everyone a great sense of community*' (Education Manager), whilst also encouraging nearby schools to take advantage of the museum's close spatial proximity.

Benefits and challenges and lessons learnt

Benefits

The main benefit highlighted by interviewees was that the visits '*extended the pupils' learning*' (teacher) and allowed them to experience things that would not have been possible in school. The teacher valued the use of the artefacts during the workshops and felt that they enabled the pupils to learn further, in a more engaged manner. Thus, learning in an historic built environment enriched the learning process for pupils. In addition, the pupils generally became more aware of the built environment around them, and were able to see links between the past and modern day built environments.

Challenges

A limited number of challenges were presented by museum staff and the teacher from Shottermill Junior School. These challenges were of a practical nature rather than specifically related to built environment education. These were:

- the need for more time between activity workshops (to allow pupils time to digest what had been experienced and learnt in the workshop)
- a lack of facilities on the museum site that provided shelter
- a suggestion that all workshop staff and guides are dressed in period costumes to encourage authenticity and make the experience more 'real' for pupils.

Lessons learnt

Practitioners running projects:

- Built environment education providers should provide opportunities for pupils to work in small groups to allow focused learning. Weald and Downland Open Air Museum do provide these opportunities and were praised by the teacher from Shottermill Junior School for doing so.
- Each pupil in a school party should experience all workshops run on the day as opposed to only experiencing some (for example, at Weald and Downland Open Air Museum the school party was divided into pupil groups and each group experienced different workshops).
- Providers should incorporate 'hands-on' opportunities where possible, such as handling artefacts or more craft-based workshops. This latter point highlights the value of direct and interactive education and the opportunities that the built environment sector can provide in relation to this.
- A member of the museum staff also suggested that it was advantageous if the museum officers had an education/teaching background. This was because it could sometimes be difficult to gauge the ability of the pupils in the group and it was thought that a background in education/teaching aided how and where to pitch the workshop.

How schools can engage with built environment education:

- Schools wanting to complement classroom-based curriculum work with Learning Outside the Classroom should consider built environment providers like Weald and Downland Open Air Museum. Specifically, the workshops offered by the museum allowed pupils to consider what Tudor life was like, including the main aspects of domestic and rural life. The historic buildings on the museum site were used to illustrate what types of activities were undertaken in the Tudor period and how the buildings were used in the past. This enabled the pupils to understand

and appreciate the past built environment and consider its place in today's built environment.

What next

The museum has plans to continue and develop this work and has submitted a planning application to build a new visitor's centre. This would provide the museum, and the schools' service specifically, with much needed space and better facilities for working with school parties. In addition, the schools' service is planning to develop a series of updated Tudor workshops focusing on children's games and a workshop around the Department for Environment Food and Rural Affairs (DEFRA) 'Year of Food and Farming' initiative, which is aimed at helping children and young people learn more about how food is grown, produced and sold. A member of staff from the museum stressed the importance of closely linking future development to the curriculum as '*there is no point us coming up with these wonderful ideas if it doesn't tie in with the curriculum*'. This highlights the importance of locating built environment education within the National Curriculum and the potential it has to encourage teachers and schools to access built environment providers.

Case study 6: Solent Centre for Architecture and Design

Partner Programme

Five key facts

Why? To provide professional advice, support and guidance to selected secondary schools about built environment education; for school staff to develop the necessary skills and knowledge to promote built environment education to other schools; and incorporate built environment education and activities into the school curriculum.

Outputs: A 'Teaching Resources Library' containing a range of materials teachers can use to deliver built environment education; the development of an inter-related Year 7 curriculum focused on built environment education; a built environment club at Ringwood School; and a mapping, data collection and analysis exercise focusing on Sholing Technology College site and surrounding community.

Outcomes: At a student level, the programme generally raised student awareness of the built environment and nurtured a respect for the school site. It also improved student inter-personal, communication and evaluative skills and was able to enhance the learning and engagement of students with learning difficulties and disabilities. At a school level, the programme impacted on the content and delivery of the curriculum, helped the school meet some of the Every Child Matters outcomes (such as Stay Safe) and saw school staff promoting and delivering built environment activities to other schools.

Benefits: The main benefits of the programme were that the schools developed and enhanced their curriculum by incorporating built environment education into the curriculum. This resulted in raised student awareness of the built environment and allowed students to learn more about the sector, including the career possibilities within it.

Lessons learnt: The programme demonstrated that individuals operating within the built environment sector (such as architects) and schools can work together to develop built environment activities and that the curriculum can be developed to incorporate built environment education. Specific issues to consider when delivering programmes of this nature included: having clear objectives of what the programme aims to achieve; and having formally agreed and defined roles and expectations for architects and other professionals involved.

Telephone interviews were conducted with:

- An architect from Snug Projects who was involved in delivering the programme
- An architect from Architecture plb who was involved in delivering the programme
- A teacher from Ringwood School
- A former pupil from Ringwood School
- A teacher from Sholing Technology College
- Ringwood School provided photographs of students making a model of their school in the Built Environment Club (see CD).

Background

The Partner Programme is dedicated to providing professional advice, support and guidance to six secondary schools in the Hampshire region about built environment education. It is intended that the schools involved in the programme will develop the necessary skills and knowledge to promote built environment education to other schools and incorporate built environment education and activities into the school curriculum.

Organisations and groups involved:
- The Solent Centre for Architecture and Design
- Architectural practices, including Snug Projects and Architecture plb
- Ringwood School and Sholing Technology College
- The rationale for selecting these two schools as part of the case study was that one had been involved in the programme for over a year and was quite advanced in its development of built environment education within the curriculum (Ringwood School), whilst the other was relatively new to the programme (Sholing Technology College).

Project aims:
- To deliver focused, high quality educational programmes and activities to six secondary schools involved in the Partner Programme and for them to be advocates of built environment educational initiatives to other schools across Hampshire. The architects and schools involved in the project are keen to see built environment education within the curriculum and thus, being delivered in lessons by teachers who understand its use and application. In addition, the programme aims to make students more aware of the built environment.

Activities:
- The Solent Centre for Architecture and Design funds independent, professional architects to work with schools involved in the programme. The architects provide advice and support to the schools about built environment activities, such as how they can be incorporated into the school curriculum. In addition, the Solent Centre has also designed a 'Teaching Resources Library' which is hosted on its website. This resource provides hundreds of images, documents, presentations and videos available as free downloads that can be used as teaching resources. Specifically, Ringwood School and Sholing Technology College have undertaken a number of built environment activities, both in their formal curriculum and out of school activities.
- The Partner Programme is not specifically linked to one particular curriculum area. Instead it focuses on providing teachers with the skills and confidence to incorporate built environment education into their teaching, whatever curriculum subject they teach. However, Ringwood School has developed an inter-related Year 7 curriculum involving history, geography, citizenship and ICT. Sholing Technology College has linked its programme to geography, design and technology, citizenship and art.

Participants:
- Six secondary schools in Hampshire (key stages 3–4; ages 11–16).
- Ringwood School is targeting its Year 7 students and Sholing Technology College is focusing on Years 7, 8 and 9. However, both schools are incorporating built environment education into the curriculum in all year groups where possible.

Duration:
- The Partner Programme is running for three academic years from 2005/06 to 2008/09.

Funding:
- South East England Development Agency (SEEDA); the Commission for Architecture and the Built Environment (CABE); and the Architecture Centre Network (ACN)

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The project

Ringwood School has been working with the Solent Centre for Architecture and Design and an architect from Snug Projects for approximately a year. The architect has provided advice to the school about how built environment education can be integrated into the curriculum and the types of activities that can be undertaken. To date, the architect has not delivered any built environment education within the classroom context but is keen to do so over the next year. Examples of built environment education activities undertaken at Ringwood School include:

- the establishment of a built environment education club which planned and built a scale model of the school
- the development of an inter-related Year 7 curriculum, including geography, history, citizenship and ICT. In each subject area, wherever possible, work is specifically tailored to the built environment. This includes: a Year 7 citizenship day focused on Ringwood as a town, including its positive and negative points; an educational day visit to Salisbury as part of the history curriculum, involving a city walk and workshops at the Cathedral; and students designing leaflets about the school in ICT to share with a school in Paris.

Sholing Technology College is relatively new to the programme (joining in June 2006) and has only worked with staff from Architecture plb on one occasion. This involved a Year 7 built environment activity week where students took part in a mapping, data collection and analysis exercise on their school site and in the surrounding community. The outcome of this activity week was an interactive map, developed by students, containing information about the local area, such as where the school is located in the context of the town[2]. The school plans to further integrate built environment education into the curriculum. For example, the school is currently discussing the possibility of an architect providing training on how issues around green schools and sustainable buildings can be incorporated into, and across, the Year 8 curriculum. The school also hopes to establish a built environment club as an after-school activity.

Outcomes and impacts

Students

The programme was felt to have impacted on students in a number of ways including: raising student awareness of the built environment; developing a range of transferable skills (i.e. communication and team-working skills); and contributing to student education and employment choices post-16.

The teacher from Ringwood School noted that he considered the schools' Year 7 students to have developed an enhanced awareness of their built environment because of the programme and, specifically, the activities that had been developed as a result. For example, the citizenship day and history trails around Salisbury focused on the architecture of the town. This was confirmed further by a former student of Ringwood School who stated:

> *It* [the built environment club] *gave me more of an awareness of how the school was set up and, in relation to school and the colleges, the differences between the two built environments.*

[2] Sholing Interactive Partner Programme Map can be viewed at: http://www.solentcentre.org.uk/education/partnerschools/sholingtechnologycollege

In addition, students were reported to have developed a greater respect for, and understanding of, their school site through learning about its design (teacher from Sholing Technology College).

As regards personal/skill development, students were reported to have benefited in the following ways:

- improved inter-personal and communication skills. For example, Ringwood School's built environment club involved students of all ages working together on activities, such as making a three-D model of the school, so '*there was a certain element of me trying to communicate with younger members of the group*' (Former student)
- thinking and evaluation skills. For example, the Year 7 built environment activity week at Sholing Technology College involved students working together to map and explore their school site. This involved a 'cost/benefit analysis' of the positive and negative aspects of the school site and what needed improving.

The programme was considered to have impacted most positively on specific groups of students, particularly those with learning difficulties or disabilities. This was because the use of a computer design programme used by Ringwood School resulted in the students '*really enjoying what they were doing*' (Architect from Snug Projects) and, as a result were able to concentrate for longer and produce a greater output of work. It also helped them develop confidence and gave them the opportunity to enjoy certain subjects. The working mediums through which built environment education was delivered (such as designing and sketching) were felt to have enhanced the learning experiences of all students and actively engaged those students with learning difficulties.

Finally, the programme was reported to have positively impacted on the career and post-16 education choices of some students from Ringwood School. Indeed, the former student interviewed had gone on to study a BTEC National Diploma in Construction and stated:

> *I had always been quite interested in building and how buildings had been put together, so, in that sense, it helped me to decide what I wanted to do after I left school.*

This influence was commented on further by the architect working with the school who stated that the project had developed many students' interest, especially those with a built environment career in mind.

School level

There were four main impacts noted by interviewees from the schools involved in the Partner Programme. Firstly, staff in both schools cited changes and development in the curriculum as the main outcome. Indeed, Ringwood School and Sholing Technology College had both developed their Year 7 curriculum, so that specific subjects were, where possible, incorporating built environment education into their lessons. In addition, Ringwood School had recently undertaken an audit of the whole school curriculum and, thus, was able to see where built environment education was already happening and where it had potential to be developed. Involvement in the programme had provided Sholing Technology College with links to expertise within the built environment sector. For instance, the school has developed relationships with local authority advisors working on sustainable school issues. Thus, the

programme provided the school with opportunities to access professional expertise and become involved in partnerships with other built environment providers. The teacher from Sholing Technology College also stated that the programme had helped the school to address some of the five outcomes of Every Child Matters. Specifically, the teacher noted the built environment work as being particularly pertinent to the 'Stay Safe' objective because the Year 7 mapping exercise looked at the school site to identify potentially unsafe areas within the immediate vicinity of the school:

> *A lot of it* [Every Child Matters] *is about being safe in the community and we certainly address that element by looking at 'are there clear pathways to school?*

Finally, there was evidence that the schools involved in the project were raising awareness of built environment education to other schools in the region. For example, a teacher from Ringwood School has worked with Years 3 and 4 in a local primary school, looking at aboriginal map making. The intention is to use this activity to then teach the pupils to map the local town.

The architects working with the schools

The two architects working with Ringwood School and Sholing Technology College felt that they had gained a great deal from being involved in the Partner Programme. Both had enjoyed their experiences, with the architect from Snug Projects stating that it had been beneficial to involve young people in the built environment education and increase their knowledge of it. However, this architect also reported feeling frustrated by the programme. This was because he had not been able to work in a classroom and be involved in the direct delivery of the built environment activities. He reasoned that this was likely to be a result of busy teacher schedules.

Benefits and challenges and lessons learnt

Benefits

The main benefits of the programme were that the schools had developed their curriculum to incorporate built environment education and that, in turn, student awareness of the built environment had been heightened. The employment of architects to provide advice and support to schools about built environment education ensured that the activities developed and delivered were of a high standard. It also resulted in the training and development of teachers in relation to built environment education. Finally, the former student from Ringwood School stated that the main benefit of the programme for him was that the built environment club met a personal interest of his. Thus, the club tapped into previous areas of interest and allowed students to learn further about the sector, including the career possibilities within it:

> *I have always had quite an interest in the built environment but there hadn't been a club that catered for it…so when this* [the built environment club] *came along, it was quite nice.*

Challenges

One key challenge identified focused on the nature of the programme itself and what it aimed to achieve, namely, that it sought to forge working partnerships between a range of individuals working in different sectors (such as education and architecture). This presented managerial challenges in terms of ensuring all key participants attended meetings, maintained effective levels of communication and worked

together effectively. The architect from Snug Projects described the programme, at times, as '*a clash of cultures*' as he was an architect who knew little of the education system, whilst the teachers knew little about the built environment sector. In addition, the teacher from Ringwood School stated that, due to the number of educational initiatives taking place in schools, it was '*difficult to persuade teachers that this is important enough to spend time on*'. Thus, the programme demanded a great deal of time and commitment from teachers. Alongside this, the teacher from Sholing Technology College described the challenge of incorporating built environment education into a key stage 4 curriculum restricted by examination requirements. Finally, as previously mentioned, the architect working with Ringwood School felt that getting into the school to deliver built environment education had been a challenge for him.

Lessons learnt

Practitioners running projects:

Key lessons included:

- having clear objectives of what the programme sought to achieve
- formally agreed and defined roles and expectations for architects and other professionals/staff in order to avoid misunderstandings on either side.

How schools can engage with built environment education:

- The programme demonstrated that, despite the challenges, individuals operating within the built environment sector (such as architects) and schools can work together to develop built environment activities. The architects appeared to have been an invaluable source of advice and support to the schools and had supported and trained teachers in understanding and delivering built environment education.
- In addition, the programme illustrated that the curriculum can be developed to incorporate built environment education.

What next?

The programme is currently in the second year of a three-year timetable. Thus, Ringwood School and Sholing Technology College intend to continue working with their respective architects and develop further built environment education activities. The architects working with both schools hope to become more involved in curriculum developments and also in the actual teaching of activities within the classroom.

Suggestions for improvement and development included:

- greater school involvement in built environment community issues such as, if a community centre is to be developed, schools being involved and engaged with the process (teacher from Ringwood School)
- more projects that attempt to incorporate built environment education into the key stage 4 curriculum
- delivery of built environment education projects by architects and other professionals within the classroom context as they offer built environment expertise.

Case study 7: English Heritage, Rievaulx Abbey Courtyard Garden Project

Five key facts

Why? To provide the opportunity for a special school to be instrumental in transforming part of a local heritage site into a sensory garden for people with disabilities and to link this with curriculum work in school and the school site itself.

Outputs: A sensory garden which can be accessed by all visitors to the abbey site. Time-lapse photographs and a video showing the development of the garden and associated activities. The production of medieval tiles which were incorporated into the garden site. Press coverage: articles in local papers, an article in English Heritage's magazine 'Heritage Learning' and an article is going in 'Education in Museums'.

Outcomes: All students from the school were able to participate in the project and experience a real archaeological dig. They were also instrumental in planning, designing, and planting the garden. Students benefited from the cross-curricular approach which helped raise their awareness of the links between history, geography, RE, art and design, English and science. It provided an opportunity to highlight the historical links between the school buildings and the abbey which helped students achieve a sense of history.

Benefits: This was a unique opportunity for the whole school to engage with a local heritage site and actually impact on its landscape. The project provided a wide range of opportunities for cross-curricular learning.

Lessons learnt: The project provided an example of how built environment education might be used to engage with special school students. Specifically, the project provided a unique opportunity for disabled students to carry out an archaeological dig on an historic site which had links with their own school site. This highlighted the historical links between the school buildings and the abbey which helped students achieve a sense of history. At practitioner level, the project highlighted the need to 'know your client group' i.e. the specific needs of special needs students and the challenges and opportunities that this presents. In particular, that teaching methods may have to be adapted to ensure that all students can participate. The need to build in sufficient planning time prior to project start-up so that activities can be linked into the curriculum and to enable detailed and thorough risk assessments to take place.

Telephone interviews were conducted with:

- A member of staff from English Heritage who worked on the project
- A teacher from Welburn Hall Special School
- Due to the special needs of the students involved, a telephone interview was not possible. However, staff at the school asked students to complete a questionnaire focusing on their views of the project. A total of 16 completed questionnaires were received. English Heritage also provided quotes from students involved in the project
- Both English Heritage and Welburn Hall School provided photographs depicting the project's development (see CD).

Background

This was a project between an English Heritage site, Rievaulx Abbey in North Yorkshire, and a local special school (Welburn Hall) to transform an unused piece of ground on the medieval abbey site into a sensory garden.

Organisations and groups involved:
- Welburn Hall Special School
- English Heritage staff (education team, staff from the Rievaulx site e.g. works manager, landscape architect, curator) and freelance staff providing specialist input, including an archaeologist, potter and a museums educator with experience of working with students with special needs.

Project aims:
- The overall aim was to create a sensory garden that could be used by all visitors, including those with disabilities. The project had a cross-curricular approach and aimed to give students a hands-on opportunity to explore science, technology and maths through archaeological excavation and the design and planting of a medieval style garden. It also provided the opportunity for English Heritage to establish and develop links with a local school (most schools that visit the abbey are on residential trips and not local to the site), which could be maintained once the project was completed. The school was also keen to establish links with a local heritage site and provide students with hands-on opportunities to explore archaeology, science and history.

Activities:
- Interactive workshops took place in school which introduced students to the abbey site and the project. Students took part in an archaeological survey of the garden site which included digging, excavating, finds washing, physical survey and recording of events. Students researched the types of plants that would be found in a medieval abbey garden; they designed the garden; made tiles and grew plants to be incorporated in the garden; and planted the garden. At the end of the project, July 2006, there was an official opening of the garden.

Participants:
- All the students from the school (approx 50 students). The majority were secondary aged students but some were younger students (the school will take pupils as young as eight) and a small number of post-16 students were also involved.

Duration:
- March 2005 to July 2006.

Funding:
- English Heritage secured £6000 funding from 'Creative Minds' for projects to improve opportunities for students to be involved in 'hands on' science activities. They also accessed a small grant from a DIY store for plants and received contributions from local garden centres for things like fencing.

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The project

The teacher from Welburn had previously worked with English Heritage on a schools' surveying day at a local deserted medieval village. From the school's perspective this previous work was extremely successful, in terms of allowing its students to be involved in surveying activities and English Heritage staff were described as 'keen' and 'supportive'. This existing link with the school meant that when an opportunity came about to create a sensory garden for people with disabilities, English Heritage

staff approached Welburn Hall School. This was an opportunity for young people with disabilities to be involved in designing and planning a garden that was to be an accessible space for all visitors. It was also an opportunity for them to be involved in a built environment project which was local to their school [the school is 15 minutes drive from the school] and had links with their school. In fact, the oldest part of the school was originally a farm owned by the abbey.

At the beginning of the project, English Heritage staff visited the school and introduced staff and students to the abbey and the project. There were three interactive workshops, each with an element relating to the development of the garden:

1) The history of the abbey and its layout (i.e. the built environment of the abbey). English Heritage staff brought in: stone from the abbey site so that students could feel and handle it; building blocks to show how an archway might be built; and pictures of the abbey layout. English Heritage staff also conducted a session at the school on sensory elements to the garden and asked students to compare and contrast different types of flooring, for example gravel versus stone, and to note the different sensory elements and what they would prefer:

   We looked at the size and texture of the path. I liked walking on the gravel because it made a loud noise when you walked … We decided that the gravel wasn't safe for wheelchair users (Student).

   Students were also asked to compare flowers and herbs for their appearance and smell.

2) Food: English Heritage staff brought in the kinds of food that the monks would have eaten and the kinds of utensils they would have used. Students had the opportunity to see, touch and smell the food and drink monks would have consumed.

3) Students met 'Brother Anthony' to gain insights into a Cistercian monk's life (Brother Anthony is a member of English Heritage staff who plays the role of a Cistercian monk). Groups of students visited the school dining room, which is the oldest part of the school, and Brother Anthony 'appeared' to speak to them. Students discussed a 'monk's day' and a 'monk's life' and questioned Brother Anthony about life at Rievaulx.

The project was linked to a number of curriculum areas:

Art and design: a medieval tiling workshop. English Heritage employed a local tiler to design medieval tiles with the students, which were incorporated into the garden design. A local handmade brick company provided (free of charge) the appropriate kind of clay that was used in the floor tiles that can be seen in the churches at Rievaulx. This company also fired the tiles free of charge. The tiler and students made a number of stamps based on medieval pictures such as a stag, a boar and a simplified stamp based on the school badge (which dates back to the seventeenth century). These stamps were used to create the tiles which were placed along the border of the stone wall in the garden site.

Geography: students learnt about the local area and the impact of the abbey on the local area. They project provided the opportunity to learn about the social, political and economic life of the abbey and local area, linking people, places, buildings and history.

Mathematics: students were involved in measuring and calculations related to the garden design, the beds and pathways

RE: students learnt about religious life at the abbey and in particular about the lives and religion of Cistercian monks

History: the project had strong links with 'Mediaeval Realms' in the National Curriculum. Students learnt about the history of the site at Rievaulx, about a medieval monk's life and this was linked with the history of the school. The role played by 'Brother Anthony' helped bring the historical aspects of the project to life and make it an interactive experience for the students

Science: students were involved in deciding which plants were suitable for the site and the period they were reflecting and also grew some of the plants for the garden. Teachers at the school worked with students to research the types of plants that would have been used in a medieval garden. They accessed reference books on medieval plants and looked at the types of plants that would have grown in vegetable and flower gardens in a medieval monastery.

Design technology: students were involved in designing the garden and the medieval tiles which were placed in the garden. Staff and students used A3 sheets of paper to design the garden. The school committed considerable staff resources to make this an intensive activity. Staff helped the students think through their designs and decide whether they were appropriate for a medieval garden.

Some of the older (post-16) students from the school walked to the abbey as part of their Duke of Edinburgh Award 'expedition'.

The initial workshops in school prepared students and staff for their first visits to the abbey in autumn 2005 to excavate the garden site. The area had to be excavated as potentially it could contain archaeologically sensitive material. The whole school was involved in this activity and everyone participated in one or two half-day visits, dependent on their needs. The excavation was the biggest part of the project and took place over four days. Depending on students' needs and the time the school had to take part, most students participated in all activities. Students were divided into groups and rotated round all the activities. Students participated in the 'excavation', in 'finds-washing' and 'recording finds'. To ensure inclusiveness, students in wheelchairs were given trays of earth containing finds:

> *So they could at least get a feel for excavating even though they couldn't get down to the ground level and do it themselves. They were always activities that everyone could take part in* (English Heritage representative).

Students also recorded the project using digital cameras and video recorders. The photos were taken in a time-lapse sequence to show the progress of the project. The video was used back at school to review with students what they had done on the site. The finds were displayed at the National Archaeology Week event held at the abbey.

After the visits, school staff worked with students on an outline of the area to use their knowledge and photographs of medieval gardens to design a garden for the site. Students were asked to design a garden that would reflect '*the values in a medieval garden*' (teacher). Students' designs were put to a panel of English Heritage experts and the best ideas were used to design the final garden.

Groups of students returned with the science teacher to plant the flowers and herbs they had grown in the school greenhouse. In July 2006, there was a grand opening of the garden attended by students and their families and school staff. The garden was officially opened by 'Brother Anthony'.

Outcomes and impacts

Students

The project provided the opportunity for the whole school to be involved in an activity *'I was determined everybody would take part'*, which, given the needs of many of the students, was challenging. It also provided all students with an opportunity to be involved in a genuine archaeological dig; it was not fabricated, where they '*got their hands dirty'*:

> *The buzz that came out on Thursday morning when we found a couple of pieces of very old tile and very old pot, it was real Tony Robinson Time Team stuff was super* (Teacher).

When students were asked what were the best things about being involved in the project they most frequently identified the archaeological work (specifically the '*digging*') and planting the garden: '*we did the cleaning and it was fantastic. I liked the dig … it was different to working in school*' (Student). They also mentioned '*meeting Brother Anthony*', visiting the abbey site, making the tiles and designing the garden.

School staff also felt that the project had impacted on students' historical understanding and thought that they had benefited from the cross-curricular approach '*where the links were clearly defined, whether it was art and design, history, or the technology and science behind designing the garden and showing how life is inter-related*' (Teacher). It was also felt by school staff that highlighting the connection between the school buildings and the abbey helped students achieve a '*sense of history in place where they are located every day*' (Teacher).

English Heritage staff also felt that the project had developed students' social and team skills by working with each other and with English Heritage staff and other professionals. The project provided them with a more challenging context in which to work away from the known environment of their school.

School level

The school had a unique opportunity to have access to an English Heritage site in a very different way '*no other school would be allowed to come and excavate an English Heritage site'* (English Heritage representative). It also had an opportunity to establish a relationship with a local heritage site to which the school buildings had an historical link and actually contribute to the development of that site by creating the garden. Links have been forged with the site, which have been maintained after the project finished. It gave school staff opportunities to link the curriculum with activities which took place during the project, for example growing plants for the garden, designing and making tiles, learning about life in a medieval abbey by talking to 'Brother Anthony'. The school had access to resources which English Heritage staff were able to bring to the school, for example stone from the site and access to the expertise of English Heritage staff and freelance professionals. It was an opportunity for school staff to do something different with their curriculum and use the abbey more in their curriculum in the future. School staff learnt more about the abbey as a

site and had the opportunity to take part in activities they would not have done before, for example creating the medieval tiles.

The teacher interviewed described the project as '*one of the highlights of my teaching career'* because it was such a unique opportunity for them to work with a local heritage site which has worldwide significance and has a link to the school site.

English Heritage

The abbey site has a sensory garden on a previously unused piece of ground. The project also provided the English Heritage Education Team with an opportunity to work with other English Heritage members of staff which was felt to have helped the organisation internally '*to improve our relationship with each other*'.

One of the key factors to the project's success identified by English Heritage staff was '*having the right people'*. All the staff, both at English Heritage and at the school, were fully supportive of the project and were committed to making it work. The staff involved also had the appropriate skills, for example the archaeologist had worked with young people before. The museum educator provided activities and ideas of things to do and was very experienced in working with children. The landscape architect advised staff on which of the students' designs would work best in the garden. They also had support from senior members of staff, for example the Inspector for Ancient Monuments and the Works Manager, who helped them with the necessary paperwork which had to be completed to ensure that the project proceeded smoothly and was successful.

Benefits, challenges and lessons learnt

Benefits

The project provided special school students with the opportunity to contribute to the development of a significant heritage site and to help shape the environment of that site to improve its accessibility for disabled users. It was a unique opportunity for them to carry out an archaeological dig on an historic site which had links with their own school site. Students could see that the activities they were involved in actually had a defined and tangible outcome i.e. the development of the garden. The English Heritage site has been enhanced and English Heritage have demonstrated its commitment to making the site accessible to all. Fifteen of the16 students who completed a questionnaire said that they would be liked to be involved in a similar project in the future. From the school's perspective, the close spatial proximity of the abbey site was intrinsic to the project's success. It meant that students were not tired by a long journey and could be up at the site in 20 minutes actually taking part in activities.

Challenges

From the school's perspective the project showed '*the pitfalls and the delights of getting involved in a big project*' (Teacher). There was a great deal of work which had to be completed in order to ensure the project was successful, for example in relation to risk assessments: '*sometimes it can feel an uphill struggle in terms of filling forms in and making phone calls*' (Teacher). The logistical challenges and administration required when dealing with young people who have severe or profound learning or physical difficulties to ensure that all students could access the site were highlighted. This meant that for one student, staff had to carry two-way radios at all times so that if there was a problem they could alert a member of staff on the abbey ticket desk to

call an ambulance. There was a need for a member of staff to be on the ticket desk at all times in case there was an emergency. Working with young people who tire easily meant that there was a need to ensure the activities were not too physically demanding.

From English Heritage's perspective, the key challenge was accessing funding. Without the grant from Creative Minds the project could not have taken place.

Students were asked if there was anything that was not so good about the project: three students said they did not like digging in the rain (this was the most frequent response); two students said that they could not get out of their chairs, either to dig in the trench or plant the flowerbeds (highlighting their frustration of not being actively involved); and one student said that s/he did not like sitting on the floor.

Lessons learnt

Practitioners running projects:

- Providers developed their skills and teaching methods for students with special needs. For example, using A3 laminated pictures to explain how arches were built or what the site looked like when it was complete rather than explaining things on the board. English Heritage staff also acknowledged that they needed to adapt the activities that they had planned to use to meet students' needs:

  > *Things like writing and drawing activities. We thought the children might be able to do some of those, but it quickly became clear that was out of the question because a lot of them they couldn't manipulate the pencil or the act of holding the pencil would take up all their concentration, so any activities like that were out of the window* (English Heritage staff member).

- Through adapting activities to meet the needs of these students, staff developed their strategies for working with students using other forms of recording and teaching methods.

- The need to be aware, if it is a special school group, of the particular needs that the students are going to have, such as access to a toilet. Site staff became more aware of accessibility issues as a result of the project. For example, the school pointed out that the disabled toilet was not very well planned in line with contemporary thinking and that a number of its students would not be able to access it.

- It heightened awareness of the need for thorough planning: '*it's looking at all the potential difficulties so that you can get over them to enable the event to take place*' (Teacher). The need to ensure that activities were realistic in terms of students' capabilities i.e. '*not letting good intentions govern your risk assessments*' (Teacher). School and English Heritage staff had to work together to solve problems as they arose.

- From English Heritage's perspective, there was a need to ensure that if they were applying for additional funding that the application process was worth the time and effort put in. For example, the small grant received from a local DIY store was not felt to have been cost-effective in the long run because of the time taken to complete the application forms.

How schools can engage with built environment education:

- The project provided an example of how built environment education might be used to engage with special school students. Specifically, the project provided a

unique opportunity for disabled students to carry out an archaeological dig on an historic site which had links with their own school site. This highlighted the historical links between the school buildings and the abbey which helped students achieve a sense of history.

What next?

The school is maintaining its links with the abbey site and the garden. Termly visits to the garden are planned to help maintain it, through for example weeding and replacing plants. Students are going to make wind chimes in art lessons, which will also be placed in the garden:

> *I want to keep a strong link, using the visits and the video we've got and the time lapse photography to say 'this is something your school's been involved in – the people who are now in Year 10 were there when they were in Year 8 etc.' and hope we maintain that link* (Teacher).

English Heritage wanted to present prizes to the students who had worked the hardest but the school asked if the money could be used to buy a trophy (with the English Heritage logo on) that could be presented every year by the school to a student for best effort in history. It was hoped that this would remind students when they finished school that '*it's worth getting involved in history beyond school because there's this thing called 'English Heritage' that we can see on our trophy*' (Teacher). As well as revisiting the site on a regular basis and awarding the trophy, the school will use the photos and video taken of the project to remind students of what they did and to maintain the links with the abbey site.

Half of the students who completed the questionnaire said that they had told their family about the project and two students had told their friends about it. When students were asked what would make a good project based on old buildings, they most frequently identified medieval buildings and castles. When they were asked who they would like to work with, they identified a range of professionals, including: archaeologists, historians, teachers, re-enactment people, storytellers and gardeners.

Suggestions for improvement

From the school's perspective, no improvements were suggested. However, the teacher emphasised the importance of him meeting with English Heritage and mapping out, well in advance (i.e. a couple of terms before the project started), how English Heritage saw the project proceeding. This allowed the teacher to link and plan the project work into work in the history curriculum:

> *We can do that next term and then we can move on to the 'medieval realms' and the role of the medieval church and medieval life and then we can also start thinking about plants found in monastery gardens and vegetable gardens* (Teacher).

Thus, from the school's perspective the time to plan the project into the school calendar was vitally important to the success of the project: 'even as a small school we've got work experience, an outward bound week and other visits going on' (teacher). It also meant that logistical plans could be finalised well in advance, for example needing use of both school minibuses to transport students to the site. Students' suggestions for improvement focused on: extending schools' opportunities

to be involved in projects like this, or extending the activities provided for example ‘everybody have the chance to do a bit more digging’. Students also provided practical suggestions for the garden and the site, such as making ‘all pathways accessible for wheelchair users’, providing a water butt to collect rain water, planting flowers to climb up the high wall, and planting a fruit tree.

Case study 8: Doncaster Design Centre, School and Community-based Design Development Programme

Five key facts

Why? To provide the opportunity for key stakeholders i.e. school pupils, staff, parents and the local community to be instrumental in the redesign of the grounds of a primary school. The pupil consultation work was facilitated by students from Leeds Metropolitan University (LMU).

Outputs: Included plans of the school showing pupils' designs; collages depicting their views on the school grounds and hopes for its future; and an interactive 3D model of the school showing pupils' suggestions for its redesign. LMU students also exhibited their project work at the university. Project outputs will also be exhibited at the Doncaster Design Centre and at the primary school, allowing the work to be seen by a wide range of audiences. A report will be produced for the school and for the landscape architect who will redesign the school grounds.

Outcomes: Pupils were involved in re-designing the school grounds to meet their own needs and the consultation process resulted in a sense of community involvement and self-worth for the pupils involved. They also learnt decision-making skills and how to achieve consensus amongst a group. The project helped develop pupil understanding of their own behaviour and what makes a good school environment (i.e. citizenship skills and the ability to empathise with others). The project provided university students with an opportunity to be involved in, and contribute to, a 'live' community consultation process and bring their skills to that process. It also provided students with an opportunity to gain valuable employment-related skills.

Benefits: The 'access planning approach' used in this consultation process was felt to have allowed participants to be fully involved in the process and make informed decisions about design issues. It is hoped that pupils' involvement in the redesign will ensure that they respect the new playground environment because they have an investment in it.

Lessons learnt:

- the need for trust between those in charge of the consultation process and the stakeholders involved
- the need for commitment from all participants and for effective monitoring to ensure that all participants are satisfied with the process and feel supported
- the benefits of such projects for university students in terms of providing them with work-related skills
- that smaller groups lead to more effective communication and larger groups are more difficult to manage
- the project also highlighted the need for detailed planning when devising a project of this nature.

Telephone interviews were conducted with:

- The freelance consultant delivering the project
- A lecturer from Leeds Metropolitan University whose students have been involved in delivering the project
- The Family Learning Coordinator at Thurnscoe Primary School
- A pupil (aged 10) from Thurnscoe Primary School.

Background

This project focused on the redesign of the grounds of a primary school. Particular methods of consultation and participation were used to involve a wide range of

stakeholders, including: pupils; school staff; parents; the local community; and students from LMU. The consultation process with pupils has been completed. The consultation with parents, staff and the community is due to take place in the near future.

Organisations and groups involved:
- Creative Partnerships
- The Hill Primary School
- Dearne High School
- Doncaster Design Centre
- Leeds Metropolitan University
- David Ireland Associates (landscape architects)
- the people of Thurnscoe.

Project aims:
- To work in collaboration with the pupils, staff, and parents at the school and the wider community in the village of Thurnscoe to create a detailed design brief for the refurbishment of the outdoor play and study areas at The Hill Primary School.

Activities:
- An initial site visit and photo survey was conducted in November 2006, followed by three two-hour workshops with pupils.
- The first workshop asked pupils to identify the good and bad things about the school and their hopes for its future development/refurbishment ('GBH'). Pupils produced collages reflecting their views on what was good and bad about the school and their hopes for the future.
- The second workshop in December 2006, focused on 'priority mapping' the good and bad points and pupils' suggestions for redesign.
- The third workshop in January 2007, focused on converting the 'paper' priority mapping onto a 1:25 scale 3D model of the school and its grounds.

Participants:
- A project coordinator/facilitator (freelance creative consultant working with Doncaster Design Centre)
- An artist/facilitator
- School staff (in particular the Family Learning Coordinator from the primary school)
- 16 Year 6 pupils from The Hill Primary School, Thurnscoe
- 16 Year 8 students from Dearne High School
- A senior lecturer and five postgraduate students from the Landscape Architecture course, Leeds Metropolitan University.

Duration:
- November 2006 to March 2007

Funding:
- Creative Partnerships provided £10,000 to fund the consultation programme. The school is paying for the landscape architect.

Contact details: James Copp, Creative Consultant Tel: 01302 746070 / Email: james.copp@btinternet.com

The project

Creative Partnerships (Barnsley, Doncaster and Rotherham) approached the project coordinator (a freelance creative consultant working with Doncaster Design Centre) to ask him if he would like to work with the school on its design brief for redeveloping the school grounds. The consultant had previously worked with the headteacher from the primary school and with staff and students from LMU. He has a wide range of

experience in community consultation and participation and uses an approach called 'access planning'. A fundamental part of the consultation process is informing participants:

> *It's capacity building people's understanding of the project and its problems and it only works if you work with a knowledgeable group of consultees and to do that you have to give them information. So a fundamental part of the process is informing people* (Consultant/project coordinator).

Five postgraduate students from LMU volunteered to work on the project as part of an elective module for their MA in Landscape Architecture (the course is professionally accredited by the Landscape Institute). The university wanted to be involved because they felt their students would benefit from a 'live' project and that the students would be able to offer something that was of value to the community. The students only worked with pupils' input into the landscape design brief. In the future there will also be input from parents, school staff and the wider community. The consultant will go through the same consultation process with the other interest groups but will adapt it to meet their needs.

Initial meetings were conducted with the headteacher and LMU staff in the autumn term of 2006 to discuss the design brief. An initial site visit and detailed photographic survey of the school grounds was conducted in November 2006. The school grounds were described as 'grey' and 'fairly grim', they are large and open with a vast amount of tarmac surrounded by security fencing and CCTV cameras (see photos). There are also some quiet study areas and a 'quad' which contains an aviary and ponds.

Three two-hour workshops were held with pupils to develop the design brief for redevelopment. A total of 16 Year 6 pupils from The Hill Primary School and 16 Year 8 students from Dearne High School were involved in the consultation process. All of the students involved from Dearne High School had previously attended the primary school and lived in the village of Thurnscoe. The university students acted as facilitators, timekeepers, coordinators and scribes, with support from the project coordinator where necessary. Two tutorials were held with the university students, their tutor, the project coordinator and artist prior to each workshop, to plan and allocate tasks and to conduct a 'dry run' of the workshop. The planning for the workshops was extremely detailed resulting in two pages of planning notes describing exactly what everyone was doing (when, where, who and how), along with very precise timings for each activity.

Workshop 1

Pupils were divided into four groups of eight in consultation with the teachers to ensure a good group dynamic. Pupils were selected because they were seen as a responsive group who would be able to contribute to the design process.

The first workshop focused on asking pupils how they felt about the school as past or present pupils. They were asked to identify the good and bad things about the school and their hopes for its future development/ refurbishment. The 'GBH' (good, bad and hopes) process was essentially a SWOT analysis. The coordinator asked pupils to brainstorm what they thought was good and bad about the school and their hopes for the future. The coordinator wrote an overview of pupils' comments on a flip chart, whilst one of the university students acted as a scribe and took more detailed explanatory notes of the brainstorm session. They then moved on to the collage process which was done on A3 sheets. Each group was colour coded and each facilitator wore a t-shirt which was the same colour as their group. Everyone had a

colour coded name badge which gave them 'buy in' to the group. Pupils were supplied with a wide range of magazines and brochures with which to create the collages. The collages were a continuation of the thinking process that was established with the GBH brainstorming.

Each group had a set of boards labeled with headings of 'good, bad, and future' and had 20 minutes to tear images out of the magazines and pin them on the board. This helped provide an overview of where the balance of opinion lay. Pupils then started making the collages, they already had their source material from which they had to choose images and arrange them in the collage. Only when everyone in the group was satisfied that the collage was in its preferred form were they allowed to stick pictures down. Pupils put what they thought were the best things, for example food and animals, in the middle of their collage (see photos) and then did the same with the bad things and their hopes for the future. Pupils were not given a great deal of time to think about the task as the idea was for them to go with their gut reaction.

Workshop 2

The second workshop began with a review and verification of the outputs from the first workshop i.e. checking that the pupils agreed with the facilitators' views of the outputs/outcomes from workshop 1. Workshop 2 focused on prioritising pupils' views on the good and bad aspects of their school and hopes for the future identified in the collages from workshop 1. Pupils also had the opportunity to do some preliminary design of where good and bad things happened by plotting them on maps of the school grounds.

Facilitators used the icons (pictures from the magazines) identified by pupils in workshop 1 to represent the top ten good and bad aspects of the school and their aspirations for the future. Pupils were then given sheets of paper for 'good', 'bad' and 'the future' and were asked to stick the icons on to the paper rating them accordingly. Thus, pupils prioritised the icons which meant that some statistical analysis could take place, for example how boys and girls rated things differently (e.g. football was given a higher 'bad' rating by the girls than the boys). An aerial photograph of the school site was overlain with a CAD drawing showing the boundary and building lines. The maps/photographs of the school were AO size (4.5 to 5 foot wide) and each group had their own map to work on. The pupils cut up the icons and placed them on the map to show where good and bad things were happening or where they would like them to happen. They could also draw and write on the maps (see photos). They completed a separate 'future' map showing the sorts of things they would like, again using the icons from workshop one. This resulted in the production of a number of large scale maps/plans showing pupils' priorities of the issues: good, bad and what they would like to see in the future and how this related to the school site. So, for example there was visual representation of where there might be a study area, where the football took place, where the bullying was happening, or where they might like to do different activities.

Workshop 3

[Please note some of the interviews were conducted prior to workshop 3 taking place].

The final workshop raised the plans into 3D. Pupils were engaged in modelling their aspirations in 3D and were '*exposed to design*' (LMU lecturer). The detailed photographic survey of the school was used to model the plans. The model was large enough (at a scale of 1:25) to allow participants to walk amongst it. A list of criteria

was drawn up and each group (pupils were split into six groups) focused on one element, for example sports and activities; landscaping and wildlife; and learning spaces. Participants then built, created and modelled elements to go into the model resulting in a 3D model of all the information the pupils had given to date. The landscape architects will use the pupils' and other stakeholders' consultation work to redesign the school grounds.

The project was linked to a number of curriculum areas, including: art and design; maths (for example looking at the size of structures, such as shelters in the school grounds); English (for example, writing notations); geography (mapping work) and citizenship.

Outcomes and impacts

Pupils

The coordinator felt that the project had given pupils a sense of community spirit as members (or ex-members) of the school and also a sense of self-worth as an individual in terms of the consultation process taking account of their views '*you're showing them their contribution is valuable*' (Coordinator). Pupils were also felt to have developed a great sense of ownership in the project and to have been empowered by that:

> *To be able to see the faces of the kids when you say to them at the plenary session 'who's going to help me tell everybody what we've done?' And they all stand up and they all want to point* (Coordinator).

The lecturer from LMU reiterated a number of these points, noting that pupils were '*delighted*' they were being listened to by professionals and semi-professionals about what their aspirations for their school were. This was reinforced to them in the reporting back sessions where the coordinator used pupils' visuals to show what had been covered and said in the previous workshop. The project also provided them with a range of practical skills including: how to prioritise; drawing skills; discussion skills; and how to present, record and model their ideas about the future of their school grounds.

The pupil interviewed who was involved in the project said that he had learnt about art and design and '*how to make school a better place*'. He particularly liked the format of the workshops which allowed him to work with his friends and liked using the subject medium, i.e. art and design. He enjoyed the '*fun*' aspect of the project and wanted to do more work with the school model. The main outcome for pupils was that the project had developed pupil understanding of their behaviour and what makes a good school environment (i.e. citizenship skills and the ability to empathise with others).

School staff noted that the project had linked into the citizenship curriculum in that pupils had to learn to interact and work with other pupils of different ages and adults in a consultative way. The family learning coordinator noted that: 'they have really worked well together, especially the younger ones working with the older ones'. The project was also felt to have improved pupils' social skills because of the interactive nature of the process and that the behaviour of the pupils involved in the project had improved.

LMU students

The project provided university students with a 'hands on', practical experience of community engagement work focused on the built environment. The coordinator noted that the project provided them with opportunities to learn about best practice in an interactive piece of community work and consultation focusing on the built environment. The lecturer from LMU highlighted that involvement in a 'live' project resulted in a much stronger focus for students and that they worked more effectively because they were working with a real client, real deadlines and other professionals. It was also felt that projects of this nature made students more employable and gave them a number of employment related skills.

The coordinator also noted that the project provided university students with an understanding of the need for, and an appreciation of, the levels of extremely precise planning required when delivering a project of this nature. He and their lecturer also felt that their interaction and communication skills had improved during the course of the project and that they had developed appropriate communication techniques for their audience.

School level

The project was seen as being of real value for the school and the community with tangible outcomes, i.e. the redesign of the school grounds, designed by the key stakeholders. The pupil interviewed felt that the project had impacted on the teachers in the school and that involvement in the project had helped them understand their pupils better as they were able to find out what the pupils liked and did not like about the school.

Benefits, challenges and lessons learnt

Benefits

Students' project work was exhibited at LMU and there were plans for the project work and outputs to be exhibited at Doncaster Design Centre and at the primary school so there will be an opportunity for it to be seen by a wide audience.

It was noted that the 'access planning approach' used here can be used as a form of consultation with stakeholders for any type of project and can be tailored to meet the needs of a specific location or community. Access planning focuses on providing '*sustainable solutions to challenges and issues presented by places and spaces*' (Project coordinator). It allows participants to make informed decisions about their (built) environment and the process provides them with relevant information to make those decisions. It also uses a range of techniques with which to communicate with participants.

LMU was seen to benefit from the project because it promoted partnership working which is one of the aims of the university's corporate plan. The work-related skills that students gained on the project meant that the university was producing '*employable students with skills they can use in the workplace*' (LMU lecturer). From the university's perspective, this type of project was also seen as valuable for the course because '*students elect to work on these types of modules and it makes the course attractive to students*' (LMU lecturer).

From the school's perspective, it was hoped that pupils would be more respectful of the new playground because of their involvement in its design.

Challenges

One of the challenges identified by participants was ensuring that pupils' voices were really listened to and the outputs produced accurately reflected their views. It was noted that some issues highlighted by pupils during the consultation process were not directly related to the project but still needed to be fed back to the school. The school's family learning coordinator highlighted that accessing sufficient additional funding to ensure that the redesign in its entirety could go ahead was a key challenge. There were also concerns that if the school was unable to access sufficient funding it would be a huge setback for the pupils when they had put so much work into the process.

Lessons learnt

Practitioners running projects:

- The coordinator felt that key to this and similar project's success was that consultees had to trust the people running the consultation process and that without that trust the process could not work. Trust was established by practitioners by showing participants that:

  > *You are interested in the project, you understand the range of issues that they're likely to be concerned about and why they're concerned about them.* [That] *you want to listen and are prepared to discuss it and you won't railroad them and that you're going to try to achieve consensus* (Coordinator).

- The detailed planning process which was incorporated into the design of this project, for example the meetings with students to plan the delivery of the workshops, was seen as essential in making the process work in practice.
- The LMU lecturer noted that commitment from all partners was extremely important *'you have to be committed to ensure it runs well, it may take more time than you've been allocated, it may mean you have to deviate or move quickly*'. Also she felt there was a need to monitor projects closely so that all participants were happy with the process.
- The benefits of such projects for university students, in terms of providing them with important work-related skills.

How schools can engage with built environment education:

- This project provided an example of real engagement of pupils in a design programme to redevelop their school grounds. The consultation methods used provided pupils with a range of valuable learning opportunities and experiences including SWOT analysis, learning how to prioritise, working with others to achieve consensus, mapping, design and modelling. The process allowed pupils to make informed decisions about the redesign of their school grounds.

What next?

Staff, parent and community consultation: the coordinator, other facilitators and the school's family liaison officer will now go on to work with staff, parents from the primary school (tapping into a pre-existing parent group) and the local community (there are community groups who are interested in the school as a community resource). The school's family liaison will be responsible for capacity building those

links. The project coordinator is also responsible for seeking additional funding to deliver the redesign (the school has some funding but additional funding will be required). An architectural consultancy has been appointed to look at the work produced by the project.

The lecturer from LMU noted that they were interested in obtaining a greater awareness of the school curriculum and how it is taught. They would like to work with individual school staff who have a particular interest in things such as 'Growing Schools' and other environmental initiatives.

Suggestions for improvement

No suggestions for improvement were highlighted by interviewees. As the family learning coordinator noted '*I wouldn't change anything about the project as it was delivered so well*'. She felt that the project had been delivered in a child-friendly way and the length of the sessions worked really well, they were not too long for the pupils and were well paced.

Case study 9: Creative Partnerships and arc, 'Shaping Our Place'

Five key facts

Why? To engage students in the Building Schools for the Future (BSF) process through exploring the architecture of the college and using this as inspiration to design their own ideal learning space.

Outputs: Life-size installation of a social space/shelter where students could sit; design ideas; photographs of the college and specifically what the students liked and did not like about the college; video presentations.

Outcomes: At a student level, the project was thought to have enhanced communication and team working skills either as a result of working with other students from different year groups and/or through developing the skills to express their opinions to others. Alongside this the project also offered students the opportunity to work with, and meet, professionals working in the built environment sector. Finally, it was thought that '*Shaping Our Place*' ultimately increased student awareness of the built environment. At the school level, the project supported learning for the teacher and provided a new resource that could be replicated in the future. In addition, the project actively fed into the BSF programme of the school. Finally, arc and Creative Partnerships Hull benefited from the development of long-term and sustainable relationships with Andrew Marvell Business and Enterprise College.

Benefits: The main benefit of '*Shaping Our Place*' was that it provided students with an opportunity to voice their views and make a contribution to the BSF process. In addition, the opportunity for students to work with professional designers and architects not only provided the students with high quality support and advice but it also served to showcase potential career opportunities within the built environment sector. Finally, the project was beneficial as it allowed Creative Partnerships Hull and arc to test and develop a methodology for delivering built environment education.

Lessons learnt: Schools embarking on changes to their school grounds, possibly through BSF, may consider how the project sought to engage students in the change process and ensure that student voice was represented. In addition, schools wanting to specifically expose students to careers in the sector should consider how the project engaged with design and architect professionals and the aspirational role that they played for the students. At a practitioner level, the project highlighted the need to ensure that the school has clear expectations of what the project and organisation are to deliver; has good planning and preparation; and to deliver project work in a way that is different from the standard classroom experience so that students are engaged and stimulated

Telephone interviews were conducted with:

- A member of staff from Creative Partnerships Hull
- A member of staff from arc (architecture centre in Hull) involved in delivering the project
- A Teacher from Andrew Marvell Business and Enterprise College
- A student (aged 14) from Andrew Marvell Business and Enterprise College.

Background

'*Shaping Our Place*' ran from December 2005 to March 2006 and involved a small group of students from Years 7 to 11 at Andrew Marvell Business and Enterprise College, Hull. The project was linked into the Building Schools for the Future (BSF) programme that the college was engaged in and involved students looking at the architecture of their college and, ultimately, designing their own fantasy learning space.

Organisations and groups involved:
- Creative Partnerships Hull
- arc (architecture centre in Hull)
- Andrew Marvell Business and Enterprise College.

Project aims:
- To link in with the Building Schools for the Future (BSF) programme in the City of Hull and engage students in project work on the design of their school environment. The project specifically sought to encourage students to explore what is might mean to design a new learning space outside of the traditional school and classroom setting. It also aimed to provide students with an opportunity to work with professional designers and architects.

Activities:
- Students produced a list of what they did and did not like about their college grounds. As a result, the Year 11 common room was chosen as an area that the students did not like and could design ideas for in order to improve the area.
- Architectural designs were shown to students as a means of inspiration and students also visited the arc building in Hull, which housed the Sorrell Foundation exhibition 'Joined Up Design for Schools'.
- Professional architects and designers were brought in to advise students in designing and making a life-size installation of a social space (such as a place/shelter where students could sit during break time).
- Students worked with a professional video-maker to record what they had covered during the project and the model that they had made. This was presented to the headteacher and senior management at the school.
- The project was not specifically linked to a curriculum area. Instead it focused on an exploration of the college's architecture with a view to the students designing their ideal learning environment. However, due to the nature of the project, the following curriculum areas were addressed: Art and Design; Design and Technology; and Art. In addition, the project workshops were sited in the art block at the college.

Participants:
- Students were recruited for the project through the college's Gifted and Talented list of students.
- Four students were selected from Years 7 through to Years 11 (key stages 3–4; ages 11–16).

Duration:
- December 2005 to March 2006.

Funding:
- Creative Partnerships, Hull and arc.

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The project

'*Shaping Our Place*' involved a combination of classroom based workshop sessions, some of which included working with professional designers, architects and video-makers, and also outside classroom experiences. A member of staff from arc (Hull's architecture centre) led the sessions, with support from the college's Leader of Learning for Creative and Performing Arts.

The project began with the students outlining what they did and did not like about their college. Photographic images were used to compile these two lists and, from this, one area (the Year 11 common room) was identified that the students would design ideas for to improve the area. Students were shown examples of professional architect's ideas and designs as inspiration. In addition, the students also visited the arc building which, at the time, housed the Sorrell Foundation Exhibition, Joined Up Design for School. This exhibition provided students with examples of what other pupils had designed in a similar exercise. Finally, professional architects and designers were brought in to work with the students in order to help and advise them to design a life-size installation (i.e. a social space/shelter where students could sit at break time). For example, one architect worked with the students to show how professional architects translate drawings into models and, thus, the relationship between two-dimensional and three-dimensional design. Finally, the students worked with a professional video-maker to record their models and chart what they had learnt during the course of the project. This was then presented to the headteacher and senior members of staff.

Outcomes and impacts

Students

The project was thought to have impacted on students in a variety of positive ways. Firstly, interviewees considered students to have benefited from enhanced communication and team working skills either as a result of working with other students from different year groups and/or through developing the skills to express their opinions to others. Indeed, it was believed that students developed skills to '*articulate their views and thoughts about quite sophisticated subject matters*' (Creative Partnerships Hull staff member). This was aptly reflected in the presentations the students made to the headteacher and senior management of the school at the end of the project, which were confidently pitched and well received (arc staff member). Alongside this, students were also thought to have gained a lot by working directly with professional architects and designers. Not only did the students enjoy the experience, as illustrated in the quotation below, but the experience also had a clear mentoring and aspirational function to it (such as presenting possible career opportunities to students).

> *It was good to work with someone who knew what they were talking about…I would like to become a professional architect when I leave school. I have thought about it before but the project has sort of made my mind up* (Student, Andrew Marvell Business and Enterprise College).

Finally, it was thought that '*Shaping Our Place*' ultimately increased student awareness of the built environment. The teacher from Andrew Marvell Business and Enterprise College thought that '*pupils in that cohort would always view places in a different light*'. He/she went on to add that the project had developed problem solving skills and that these students had learnt to look for alternatives and, essentially, '*think outside of the box*':

> *…it isn't just based on what you know and, if it is, it is always limited. If you want to do something new then you have to find out what the alternatives are* (Teacher, Andrew Marvell Business and Enterprise College).

School level

As the project sought to specifically work with a small cohort of gifted and talented students, the overall impact on the college was considered to be minimal. Consequently, it was thought that Creative Partnership Hull and arc needed to consider engaging with a greater number of students in future activities of this nature. That said, however, interviewees did highlight two main ways in which the project impacted on the school as a whole. Firstly, it was believed that the project had supported learning for the teacher and had provided a new resource for them that could be replicated in the future. In addition, the project actively fed into the BSF programme of the school. It was thought that the school learnt and saw how student voice could be included in the BSF process and also that there were outside agencies, like arc and Creative Partnerships Hull, that could provide help, assistance, advice or delivery of material.

Creative Partnerships, Hull and arc:

The development of long-term and sustainable relationships with Andrew Marvell Business and Enterprise College was identified as the main benefit by both organisations. Specifically, arc has actively continued to work with teachers and students from the college. This has included Architecture Week 2006, where students took part in sessional work at the arc building in Hull, and a current project where 40 students are visiting a new build theatre and then considering how they would have designed the theatre and what use of the space they would have made.

Benefits and challenges and lessons learnt

Benefits

The main benefits of '*Shaping Our Place*' was that it provided students with an opportunity to voice their views and '*actively make a contribution to the BSF process*' (Creative Partnerships Hull staff member). As the project linked into something that directly influenced the students (i.e. their school) a sense of ownership was fostered, thus helping to ensure the project was successful and that the students were engaged:

> *Students could really buy into the fact that they were actually discussing and dealing with what were real life issues…So, enabling them to have their voice and not doing it in a tokenistic way* (Creative Partnerships Hull staff member).

In addition, the opportunity for students to work with professional designers and architects not only provided the students with high quality support and advice but it also served to showcase potential career opportunities within the built environment sector. Finally, the project was beneficial as it allowed Creative Partnerships Hull and arc to test and develop a methodology for delivering built environment education. Such is the confidence in this methodology that both organisations thought that the project could be easily replicated within other schools:

It has provided a template of a model while both ourselves and arc feel very confident about and we feel that we can actually build on that with other schools (Creative Partnerships Hull staff member).

Challenges

The main challenge identified by all interviewees was related to timetabling issues and the inherent difficulties associated with getting secondary students out of lessons in order to attend the workshop sessions. In an attempt to address this, Andrew Marvell Business and Enterprise College staff ran the workshop sessions at different times during each week and so students were not always missing specific lessons. In addition, students were afforded the freedom to essentially 'dip-in and dip-out' of the workshops as and when, providing them with some flexibility and freedom.

Other challenges presented by the project included:

- 'wrapping the project up' and managing student expectations – the project required students to consider what they did not like about the school and design solutions for one chosen area (i.e. the Year 11 common room). However, no changes to the common room were planned. Thus, the challenge was '*how do you give it a good conclusion so that you are managing expectations of the students and the school?*' (arc staff member).
- project continuation – good relationships between arc and the students were forged during the project. However, it is unlikely that the organisation will work with the same cohort of students again. This makes it difficult to map the impact of the project in terms of issues like career and future educational choices. For example, '*how do you map if that girl who said I want to have a career in architect applied for a course. I have no idea*' (arc staff member).

Lessons learnt

Practitioners running projects:

A number of key factors were cited as being central to the successful delivery of this type of project in the future. These were:

- ensuring that the school has clear expectations of what the project and organisation are to deliver
- the need for good planning and preparation
- delivering the project work in a way that is different from the standard classroom experience so that students are engaged and stimulated.

How schools can engage with built environment education:

- The project presents a model of engaging students in built environment education and, specifically, the Building Schools for the Future (BSF) agenda. Other schools embarking on changes to their school grounds, possibly through BSF, may consider how the project sought to engage students in the change process and ensure that student voice was represented.
- The contact students had with professional designers and architects served an important role in highlighting possible career opportunities within the built environment sector. Schools wanting to specifically expose students to careers in the sector should consider how the project engaged with these professionals and the aspirational role that they played for the students.

What next

As noted previously, arc and the college have remained in contact and have worked together on a number of occasions. Currently, the college is one of the core contact schools that arc has for the CABE programme, ‘How Places Work’.

Creative Partnerships Hull and arc are currently working together to look at how they can apply a similar project to both primary and secondary schools. Specifically, both organisations are investigating ways in which student voice can be further included in the BSF process.

4 Conclusions and recommendations

This research has shown a wide range of innovative activity taking place in built environment education. It has also highlighted a number of key messages which can be taken forward with the *Engaging Places* project. The interviews conducted, both during the telephone survey and case-study stage, highlighted the enthusiasm of providers, teachers, students and pupils involved in built environment activities, giving them opportunities for new ways of thinking, learning and interpreting the context in which people live and work. A key element of this enthusiasm was the local grounding of much built environment education - using local relevance to introduce and develop understandings of concepts, subjects and learning areas, which can then present opportunities for wider transference, whether participants are involved in redesigning their school or their local communities, for example.

Providers used the built environment to help teachers and pupils interpret, contextualise and understand wider political, social and cultural change. Built environment education provided opportunities for participants to map issues of culture, change, conflict and landscape interactions. For example, it allowed students to 'see' history in the built environment and understand how historical changes are manifest in the landscape. Built environment education can provide participants with opportunities to reflect on how their current actions will impact on the built environment of the future.

The case studies show the potential that built environment projects can have for supporting and enhancing cross-curricular work and that their remit and impact is often far wider than just a specific project. The research has also shown how things like community consultation can feed into other strategies and policy developments, such as Building Schools for the Future and Sustainable Schools.

Overall, as a result of the research, a number of questions and recommendations have been raised for consideration:

- There are challenges that are still presented by the term 'built environment education' and issues relating to its definition. A number of interviewees struggled to understand the meaning of the term or link it with the work they were doing. This may suggest that there is still a need to raise the profile of built environment education so that schools can understand what it is and see its potential link to the curriculum. Alternatively, this may suggest that 'built environment education' is too general and covers too broad a range of disciplines that may be better off existing individually. In this sense, is Engaging Places trying to recreate something that should not exist?

- Whilst recognising the benefits and opportunities presented for cross-curricular learning by built environment education, teachers need to be

able to link it to particular curriculum subjects. Built environment education with strong and explicit curriculum links or related to particular school issues is more likely to be taken up by schools and teachers.

- Issues of continuing fragmentation within the sector, along with the need for a strong strategic overview were raised, highlighting the potential of role of *Engaging Places* in assisting to 'join things up' and provide a strategic overview. However, would the sector benefit from being joined-up more? What added value would be derived by creating an additional 'umbrella' organisation over all of these other organisations? Is there a danger that the sector would become provider-led rather than user-led?

- Finally, the study has also highlighted the need for partnerships to be formed across sectors, not just with those organisations operating in the same sector, which would also help address issues of fragmentation.

Appendix

Table 4.1 Organisations included in the telephone survey

Organisation		Sector	Name of Contact	Job title
1	Schools Works	Built environment	Sarah Hill	Head of Research and Publications
2	Civic Trust	Heritage	Ann Todd	Head of Education
3	CABE	Non-departmental public body (Built environment)	Nancy O'Brien	Head of Education
4	DfES - Education Outside the Classroom	Government	Adrian Gough	Policy Advisor
5	Architecture Centre Network	Built environment	Catherine Williamson	Education Coordinator
6	The Princes' Foundation for the Built Environment	Heritage	Ben Bolgar	Head of Design
7	Historic Houses Association	Heritage	Frances Garnham	Assistant Director for Policy and Campaigns
8	MLA	Non-departmental public body (Museums and galleries)	Jonathan Douglas	Head of Policy Development

9	Arts Council England	Non-departmental public body (Arts)	Stephanie Fuller	Public Art and Architecture Officer
10	Churches Conservation Trust	Heritage	Virginia Simpson	Education Officer
11	Black Environment Network	Heritage	Judy Ling Wong	UK Director
12	QCA	Education	Jerome Freeman	Curriculum Advisor
13	Planning Aid	Built environment	Carol Ryall	Director of Planning Aid for London
14	Heritage Link	Heritage	Kate Pugh	Secretary
15	Groundworks	Built environment	Chris Southwood	Theme Coordinator
16	The Historical Association	Subject association	Alf Wilkinson	Professional Development Manager
17	Geographical Association	Subject association	Diane Swift	Curriculum Leaderships Project Manager
18	Royal Geographical Society	Subject association	Steve Brace	Head of Education and Outdoor Learning
19	Creative Partnerships	Arts	Paul Collard	National Director

20	The Pilgrims' Association	Heritage	David Earlam	Secretary
21	Citizenship Foundation	Subject association	Tony Breslin	Chief Executive
22	Heritage Lottery Fund	Lottery provider	Jo Reilly	Policy Advisor: Access and Learning
23	The 24 Hour Museum	Museums and galleries	Anra Kennedy	Head of Learning
24	English Heritage	Heritage	Tina Corri	Head of Education
25	Council for British Archaeology	Heritage	Don Henson	Head of Education
26	Heritage Education Group/Heritage Education Trust	Heritage	John Hamer	Engaging Places Advisor
27	RIBA Trust	Built environment	Rob Wilson	Curator of Programmes
28	English Heritage	Heritage	Tracy Borman	Director of Learning
29	Olympic 2012	Government	Fergus Muir	Cultural Programme Advisor
30	DCMS	Government	Louis Moreno	Architecture and Education Policy Advisor

31	Church of England	Heritage	Rebecca Payne	Policy Officer in the Cathedral and Church Buildings Division
32	Specialist Schools Trust	Non-departmental public body (Education)	Kevin Jones	National Specialism Coordinator: Technology Colleges
33	National Trust	Heritage	Laura Hetherington	Head of Learning
34	Academy for Sustainable Communities (ASC)	Built environment	Trudy Birtwell	Learning and Resources Manager
35	Institute of Civil Engineers	Built environment	Andrew Davidson Lynden Cable	Education and Careers Senior Executive Volunteer for Yorkshire and the Humber
36	South East England Development Agency (SEEDA)	Regional development agency	Miranda Pearce	Urban Renaissance Manager
37	CITB	Built environment	Howard Pearson	Education Manager
38	Sport England/Building Schools for the Future	Built environment	Rebecca Bracey	BSF Project Manager (Yorkshire and Humberside)

39	English Heritage - Yorkshire	Heritage	Lynne Minette	Education Manager – Yorkshire Region
40	Yorkshire Forward	Regional development agency	Robert Allen	Strategic Manager, Strategic Economic Zones
41	MLA (Museums, Libraries & Archives) Yorkshire	Museums and galleries	Jane Walton	Head of Development
42	Enterprise Insight	Enterprise	Jane Walton	Campaign Leader
43	York Museums Trust	Museums and galleries	Martin Watts	Director of Lifelong Learning

44	Canterbury Cathedral	Heritage	Alison Hurst	Schools Officer
45	National Monuments Record	Non-departmental public body (Built environment)	Mary Mills	Education Officer
46	CAPE UK	Arts	Jael Edwards	Development Manager
47	Our Hut	Built environment	Judy Evans	Project Worker
48	Arts Inform	Arts	Frances Morrell	Co Director
49	Fundamental Architectural Inclusion	Built environment	Nick Edwards	Company Director
50	Greenwich Foundation for the Old Royal Naval College	Heritage	Jo Hall	Education Officer
51	Sir John Soane's Museum	Museums and galleries	Jane Monahan	Education Officer
52	The Architecture Foundation	Built environment	Nathalie Weadick	Deputy Director
53	The Glass-House Community Led Design	Built environment	Sophia de Sousa	Chief Executive
54	Sutton House	Heritage	Daniel Ferguson	Learning Officer
55	Southwark Cathedral	Heritage	Sandra Newnham	Education Officer

56	Historic Royal Palaces	Heritage	David Souden	Head of Access and Learning
57	Dulwich Picture Gallery	Museums and galleries	Gillian Wolfe	Head of Education
58	Serpentine Gallery	Museums and galleries	Sally Tallant	Head of Education and Programmes
59	The V & A Museum	Museums and galleries	Kara Wescombe	Schools Officer
60	Open House	Built environment	Victoria Thornton	Director
61	Westminster Cathedral	Heritage	Patrick Roberts	Director of Tours
62	London Schools Arts Service (LONSAS)	Arts	Mary Brown	Web Editor
63	English Heritage - London	Heritage	Pippa Smith	Education Manager – London and East of England
64	The Building Exploratory	Built environment	Nicole Crockett	Director

65	Solent Centre for Architecture and Design	Built environment	Mark Drury	Director of Arts and Education
66	Learning through Landscapes - South East	Built environment	Gary Burn	Director
67	Weald and Downland Open Air Museum	Museums and galleries	Jennie Peel	Education Manager
68	Groundwork Thames Valley	Built environment	Kathryn Horsepool	Education Officer
69	Kent Architecture Centre	Built environment	Annette Hards	Architect in Education
70	De La Warr Pavilion	Built environment	Polly Gifford	Head of Education
71	English Heritage - South East	Heritage	Michael Newman-Horwell	Education Manager – South East
72	Dorchester Abbey	Heritage	Sue Dixon Sue Booys	Education Officer Reverend

73	DIG	Heritage	Rachel Carver	Education Officer
74	My Learning	Virtual resource	Vicky Mitchell	Renaissance Yorkshire Hub E-Learning Manager
75	Arc	Built environment	Gillian Dyson	Learning Officer
76	Fountains Abbey	Heritage	Tessa Goldsmith	Learning and Interpretation Officer
77	Armley Mills, Leeds Industrial Museum	Museums and galleries	Dominique Attwood	Learning Centre Coordinator
78	Yorkshire Sculpture Park	Built environment	Geoff Whitten	Education Coordinator: Schools and Colleges
79	South Yorkshire Centre of Vocational Excellence in Construction (CoVE) - Dearne Valley College	Education	Gary Lee	Programme Area Manager: Construction

80	Eureka! The Museum for Children	Museums and galleries	Tudor Gwynn	Learning, Exhibitions and Site Director
81	The Churches Regional Commission for Yorkshire and the Humber	Heritage	Zoe Kemp	Culture Officer
82	National Railway Museum	Museums and galleries	Tony Simmons	Education Manager
83	Public Arts	Built environment	Jane Hope	Senior Learning Manager
84	Sheffield University - School of Architecture	Education	Rosie Parnell Vicky Cave	Research Associate Research Associate
85	National Trust Yorkshire region	Heritage	Jo Foster	Regional Manager for Yorkshire Region
86	York Minster	Heritage	Jeremy Muldowny	Education Officer
87	Doncaster Design Centre	Built environment	Jeff Prior	Principle Planner

88	Camden Borough Council	Local authority	Rebecca Stalker	Camden Young Archaeologist's Programme Coordinator
89	Newham Borough Council	Local authority	Andrew Mutter	Arts Advisor
90	Hampshire County Council	Local authority	Clare Dobbs Chris Elmer	Trailblazer Project Manager Deputy Head of Learning, Access and Interpretation Team for the Museums and Archives Service
91	New Forest District Council	Local authority	Neil Williamson	Environmental Design Manager
92	Kent County Council	Local authority	Ian Coulson	History Advisor
93	East Riding Borough Council	Local authority	David Mell	Teaching and Learning Consultant for the Creative Arts

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