Sure Start children's centres: A post-occupancy evaluation



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Published in 2008 by the Commission for Architecture and the Built Environment.

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ISBN: 978-1-84633-021-6

CABE is the government's advisor on architecture, urban design and public space. As a public body, we encourage policymakers to create places that work for people. We help local planners apply national design policy and advise developers and architects, persuading them to put people's needs first. We show public sector clients how to commission buildings that meet the needs of their users. And we seek to inspire the public to demand more from their buildings and spaces. Advising, influencing and inspiring, we work to create well-designed, welcoming places.

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Executive summary

Most new Sure Start children's centres are performing well and are supporting the government's aim of giving pre-school children the best start in life. However, the two-year turnaround time allowed to build them is proving very challenging for local authorities and the heads of the new centres. This is having an impact on design: although families are rating the centres highly, very few centres are rated as good by CABE's design professionals.

Introduction

The provision of 3,500 Sure Start children's centres by 2010, one for every community in England, is central to the government's aim of creating the best possible start for pre-school children. Some 2,500 children's centres had been built by April 2008, with another 1,000 due for completion by 2010.

But how well are the new centres performing? And what lessons can be drawn from them for centres that are about to be built, and for similar capital programmes in the future?

This research was conducted by CABE and commissioned by the Department for Children, Schools and Families (DCSF). The study, which took the form of a post-occupancy evaluation of 101

centres, was completed two thirds of the way through the Sure Start programme¹. Post-occupancy evaluations are qualitative studies that concentrate on the buildings themselves rather than the quality or variety of service provision or the outcomes for users.

This executive summary sets out the key findings and recommendations from the research. The full report also includes detailed discussion of best practice in the design of children's centres, and case studies that show what can be achieved.

A summary of the research methods and objectives is set out on page 15.

Findings

The results from research into the children's centres show that the majority are considered good by the staff and parents, who are pleased to have the new facilities. On the whole, the centres are fit for purpose.

However, the architecture and design professionals – 'enablers' working for CABE on a consultancy basis – who conducted the evaluations considered the design of very few centres to rank as good or excellent. In many cases, some fundamental aspects such as environmental sustainability, external identity, storage and adult spaces are either not well designed or not included. Designs also need to cater for a wider and more varied range of uses because the buildings are more than just children's centres: they offer a wide range of family-orientated services.

Children's centres are small but highly complex buildings with relatively modest budgets. However, they need to be imaginative, inspiring and uplifting as well as comfortable and practical. Elements that have prescribed space standards, such as children's play areas, or that have a dedicated separate budget, such as furniture and equipment, are well designed and specified and were given higher ratings by centre users. However, those elements that are not defined

through standards and those without a dedicated budget, such as outdoor play areas, adult spaces, storage and environmental sustainability were poorly rated and lacking in both quality and provision.

The two-year turnaround time demanded by the Sure Start programme to date has proved very challenging for the local authorities and centre heads who have to act as the clients in the building process. The speed of the process for phase one (the centres in this research) has not allowed enough time for local authority service providers to form multi-departmental working group teams to finalise the service plans and inform the brief. This may be improved in phase three as local authority teams will already be established and will have experience of this building type.

The speed of the programme is also not allowing for proper involvement of staff, parents and the community in design decisions. Where this involvement has happened, it is shown to have had an important influence on the users' positive perceptions of the centres, above that of the actual quality of the building itself.

For more detail on these process-led problems, see the section 'Why is this happening?' on page 11.

Overall ratings

Centres were scored by both enablers and users on a scale of 1 to 5 on a range of specific features (where 1 was 'unacceptable' and 5 was 'excellent') and then given an overall score based on the average of these feature scores.

Parents and staff think the centres are 'good to excellent'

The majority of centres were rated overall as 'good' by the centre staff and parents². Looking at the results of 2,075 questionnaires covering 101 centres:

- 78 were rated 'good to excellent' overall by staff, parents and management and members of the public (4.16 was the average score)
- 21 centres were rated 'neutral to good'
- two were rated 'poor to neutral'.

Parents were very positive about almost all of the buildings and the benefits that they feel result from using them. They were particularly struck by the positive atmosphere and environment.

Staff were also positive, though marginally less so than parents. Design quality appears to be contributing to staff recruitment and retention and to increasing their job satisfaction.

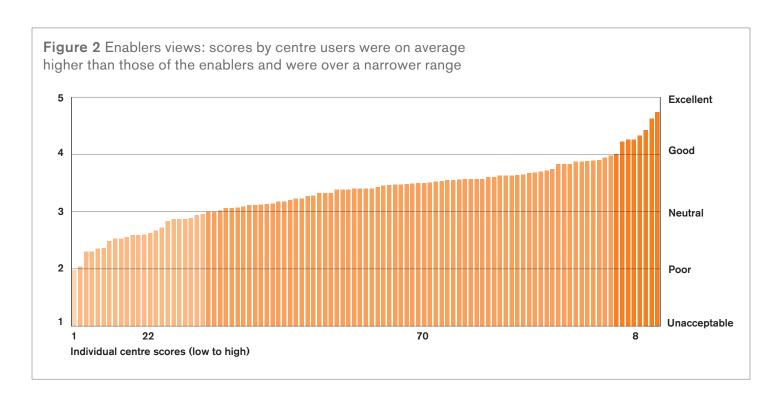


Enablers think the centres are 'neutral to good'

CABE enablers rated the majority of centres as 'neutral to good', although they considered almost a quarter of them to be poor. Of the 101 centres:

- eight were rated 'good to excellent'
- 70 were 'neutral to good'
- 22 were 'poor to neutral'
- one was 'unacceptable to poor'.

Enablers found that the centres worked overall but that there was room for improvement. The designs that were appreciated had imaginative, child-friendly and well-developed ideas, but it is essential to get the basic things right first: sound construction, a comfortable environment in all respects and the right size and arrangement of spaces. Their assessment reflects the fact that this does not happen enough. Enablers also thought that most centres did not show a particularly inspirational level of design.



The designs

A good centre will be well designed overall

Centres with a high overall rating generally achieved good ratings in all areas on the questionnaire. This suggests that the designer client partnership was strong, leading to a better understanding of the brief, more unified decision-making and a higher final quality.

A few centres were good on the whole but had a couple of very poorly rated elements such as transport or access that brought the overall score for that centre down. This does flag up the importance of the local authority choosing the right site. Robust feasibility studies that assess both service provision and the physical constraints of a site are a key consideration affecting the overall quality and usability of the building.

See recommendations 2 and 12

Well-rated elements

Children's play areas and babies' rooms were rated 'good' by over 90 per cent of staff and parents and over 70 per cent of enablers, both in terms of quality of space and size.

Other elements that achieved high ratings from both centre users and enablers were:

- light
- atmosphere/feeling
- children's and babies' play equipment
- children's furniture
- windows
- colour and decoration.

Areas of concern

Some design elements were repeatedly rated as poor or unacceptable. These were:

- lack of external identity, poor approach and signage
- insufficient storage throughout, with special problems being found with buggy storage and storage for flexible community spaces
- poor-quality spaces for staff and adults, including community and training rooms
- absence of measures to make the building environmentally sustainable, and lack of community energy strategies

- excessive noise from hard surfaces
- unimaginative, small outdoor areas with little weather protection and poor connections with indoor play spaces, and a lack of access to nature
- low rating for environmental comfort: bad thermal performance or conversely overheating and lack of cross-ventilation
- transport difficulties (either not well connected to public transport, or car parking provision insufficient).

See recommendations 4, 7, 11 and 17

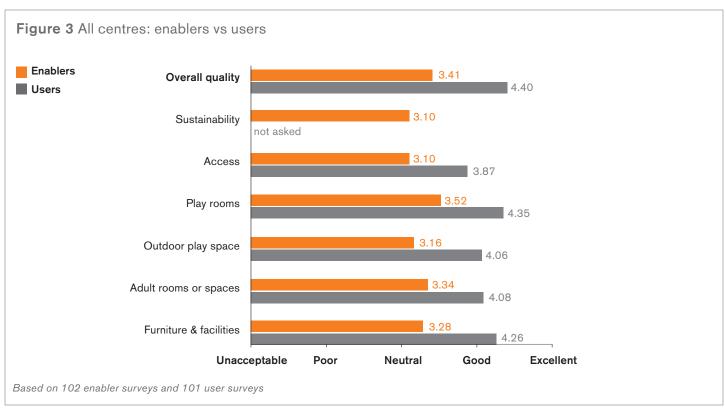
Differences of opinion between centre users and enablers

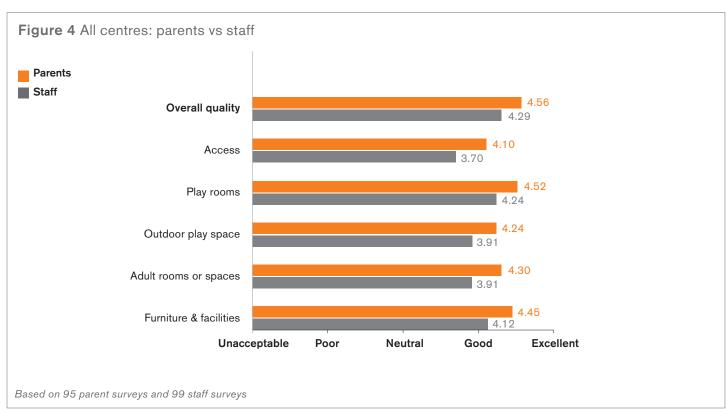
Averaging across the group of questions covering each topic, the centre users scored their centres higher than the enablers for each group by between three quarters and a whole point (see figure 3).

This difference in response is common to surveys where data from different groups of respondents is used. Parents benefit strongly from new facilities and are therefore likely to be the most positive about them. Staff were slightly more critical because they have to cope with any problems on a day-to-day level but they are also glad to have new facilities (see figure 4). The professional view of a CABE enabler, on the other hand, is likely to be moderated through comparisons of the different centres they survey, is less partial to the provision of services, and casts a critical eye over physical issues such as the way the building looks and performs.

Why do users praise buildings that are seen as unremarkable by building design professionals? In most cases, they value service provision so highly that the operation and appearance of the building are secondary.

Looking at the users' responses, both where they gave ratings and in the sections of the questionnaire where they wrote what they felt about the centres, it seems that parents and carers were very influenced in favour of the centres by the excellent support given to their children and themselves. The centres built in phase one and covered by the study serve the most deprived areas and many parents and carers are unlikely to have had any similar provision in their area. Families who may have no outdoor space of their own at home will find the generous child play spaces especially welcome.





The buildings

Procurement

Out of 95 centres for which the procurement method was known, local authorities had used the following routes:

- 71 used traditional procurement
- 16 used design and build
- seven were partnering arrangements
- one was private finance initiative (PFI).

The PFI-procured centre was rated poorly in terms of design quality, followed by design and build, with partnering then traditional construction being more highly rated. This suggests that for this scale of project, the traditional procurement route is the most advantageous and has proved the most successful for control of budget and quality, with partnering also showing some successful results (see figure 8).

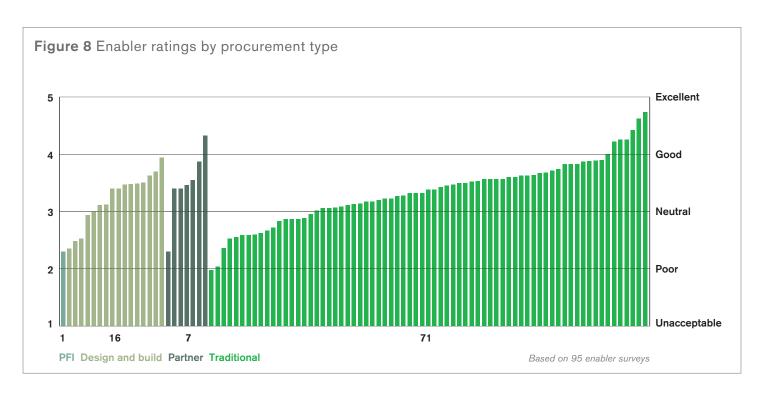
Building types

The schemes included in the study were:

- 49 new build, traditional construction
- 29 refurbishment
- 14 extension
- nine new build, modular.

Figure 9 shows the ratings against build type. Modular build scored lower than other building types, although note that only nine examples of modular build were recorded.

The variations in user ratings are small but they suggest that special care needs to be taken with design and build and with modular construction.



Siting

Forty per cent of children's centres were located next to existing primary schools, either as extensions or new builds. This follows the government's agenda for extended schools and wraparound care through the co-location of facilities. However, siting on school grounds does lead to a reduction in playground space for an existing school and also to access difficulties.

See recommendations 2, 5 and 15

Diversity of buildings, and brief

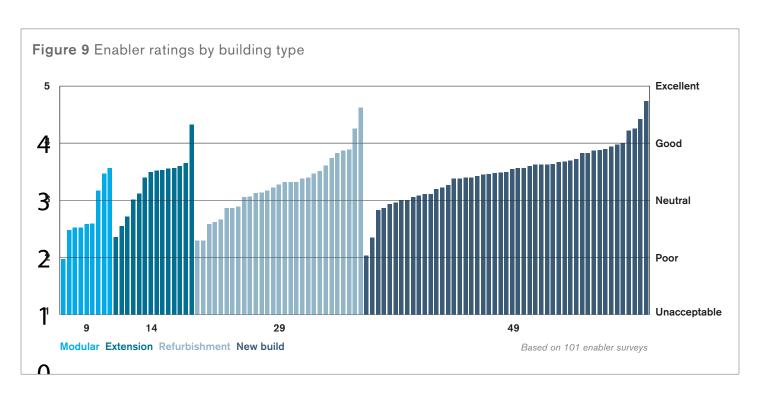
Each centre was designed according to the needs of the local community, the available site, the service provision of the local authority and the funds available. There was no 'standard' children's centre: each is unique and will have a brief based on the area, site specifics and provision.

See recommendations 2, and 10

Building standards

Results suggest that, with the relatively small budget available to most centres, only those features that form the core requirement and those that have dedicated budgets are being provided adequately. Elements such as adult space, outside space, storage and environmental sustainability, for which there are no specific requirements or budget, are lacking in both quality and provision.

See recommendations 3, 5 and 15



Why is this happening?

In addition to assessing the quality of the design of the individual buildings, CABE enablers also identified a number of process-led problems in their reports. Most of the issues that impact greatly on quality can be attributed directly to the short funding cycle, which is having a fundamental impact on the quality of the completed buildings:

Failure to involve stakeholders sufficiently in the briefing and design process

The most successful buildings involved staff and parents in a collaborative, two-way design process, but this needs sufficient time to be orchestrated, and designers who are skilled in user participation. The two-year programme provided for the Sure Start centres does not allow any time for consultation within the period for the larger building projects.

See recommendations 2 and 10

Location and site difficulties

Meeting the timetable often means that sites selected are already in local authority ownership, but they may be neither the best nor the most costeffective to develop. Site appraisals by local authorities were often not carried out in enough depth or were focused either on physical constraints or service provision, very rarely both. The two-year programme provided for Sure Start centres allows no time to find new sites with good prominence and access.

See recommendations 2 and 12

Complex service provision leading to difficulty in determining the brief

Preparing an accurate brief may not be possible in cases where service provision from different local authority departments, or private providers, has not been finalised. The brief for a children's centre is very reliant on the formulation by the local authority of a comprehensive service plan. If a totally different service is provided than what was originally intended, the relation of the spaces to each other and their size and location may not be entirely appropriate.

See recommendations 2 and 9

Uncertainty of funding

The basic funding of the children's centres through the Sure Start capital grant is not sufficient to provide for good quality adult, community and ancillary spaces. Each authority will determine any extra funding in addition to the Sure Start grant to be allocated through a number of routes due to the different services being provided. The total construction budget may not be known until the bidding process. Centre managers and designers clearly identified this as problematic and conflicting with the need to produce a solid brief early enough in the programme. Funding from other government sources is difficult to co-ordinate in the timeframe.

See recommendations 3, 12 and 13

Case study: Pen Green Centre for Children and Families, Corby, Northamptonshire

Pen Green has been a long-term project with funding from successive waves for different elements of an early years excellence centre³. Two child-orientated projects feature⁴.

Sure Start trailblazer project: the beach

Behind a new entrance, and tying the whole development together, an L-shaped, single-storey suite of rooms around a fully glazed 'cloister' corridor links with the existing nursery to form a courtyard with a 'beach' at the heart of the centre. Overall, the development, designed by Greenhill Jenner Architects, is extremely successful. The beach provides an exciting and inspirational focus for the centre and a clear statement about its values: children and the importance of play and learning.

Neighbourhood nurseries initiative: the nest

The new baby and toddler nest designed by John Bovinck adjoins the existing nursery, housing a playroom. The new extension is flat roofed with transparent end walls that connect to the small enclosed babies' garden and the main nursery garden. The nest is only small, but incorporates lots of exciting and playful design. Much of it is organised to allow children to explore the spaces as independently as possible, while being nurtured to feel safe and secure, with a warm and welcoming atmosphere.

What Pen Green does well

- a clear vision informed the design
- bespoke design of different areas
- creative design allows for fun and ingenuity of spaces suitable for children
- well-considered links allow relationships between children of different ages, community users and the natural environment
- it provides a strong community focus
- makes good relationships between internal and external spaces.

Recommendations

The recommendations emerging from the research cover the process of delivering children's centres and are also intended to inform policy for future capital programmes. They relate to the different roles involved in delivery and are aimed at anyone in central and local government concerned with public building programmes.

Recommendations for central government and the DCSF

1 Long-term quality

The government's own common minimum standards⁵ in the public sector for the built environment should encourage local authorities to adopt good practice in procurement. However, many of the problems encountered show that this is not happening.

The government should review its common minimum standards and:

- extend their mandatory status to local authorities and other bodies delivering public buildings
- ensure that long-term quality is the prime consideration, above cost-effectiveness.

2 Consultation and preparation

This study suggests that a children's centre will be more successful and receive higher ratings where there has been active user participation in the design and where the community has made decisions about it. Time for user involvement is not included as part of the programme and the two-year period is barely sufficient time in which to get the larger centres built.

The government should:

- allow sufficient time for local authorities to purchase new sites and do feasibility studies of existing sites
- include time in the programme for the establishment of new teams requiring inter-departmental cooperation within local authorities: these will take time to start to work together efficiently on new programmes
- allocate specific time for stakeholder involvement as an integral part of the programme.

3 Funding

Funding issues, including uncertainties and changes in funding availability, are cited anecdotally as reasons why poor decisions are taken. The government should:

 ensure funding to provide long-term quality in terms of community resources as well as children's spaces

- maintain consistency of support to local authorities: changes in departments and policies are detrimental to long-term projects
- harmonise funding timetables between government departments to allow flexibility for local authorities to be able to secure the full range of funds for public projects and channel funding for capital projects through one source.

4 Design quality

Building a design quality assessment into the process would help to minimise strategic mistakes and establish key priorities.

The government should ensure that a design quality rating is built into the assessment procedure used by its technical advisors at the briefing stage as well as in the assessment of tenders and on completion.

5 Outdoor play space

The government should set minimum standards for outdoor play, and consider funding this separately to achieve a high-quality play space for every children's facility.

6 Environmental sustainability

The government should:

- set environmental standards as a requirement for all public sector procurement, including through local authorities and healthcare trusts, with targets of BREEAM 'excellent' for new build, and 'very good' for refurbishment
- measure and monitor consumption using an established common method, set consumption targets, ensure that these are achieved, and publish data for all public buildings⁶
- make whole-life costing mandatory for procurement of public buildings and publicly report the data on whole-life calculations.

7 Monitoring quality

Continuous improvement of the quality of public buildings can be achieved if the capital process begins with an evaluation of what works well. The government should:

- require design teams to submit accurate and comparable project data at the end of schemes
- introduce a procedure to log the procurement processes involved for all capital building projects
- make post-occupancy evaluation a condition of receiving capital funding for future projects.

For local authorities

Local authorities act as the client alongside the users and have control over their own local interpretation of the process and the amount of support they provide. They will be responsible for the continued maintenance and running of the facilities and the success of the policy for children and families in their area is dependent in part on the successful design of these facilities. With phase three of the children's centres starting, the recommendations below are principally aimed at reinforcing and detailing some of the practices outlined in the standards that will make the existing system work better for local authority clients.

8 Best practice in procurement

Local authorities should use the Office of Government Commerce's common minimum standards⁷ as a basis for best practice in the procurement of all public buildings but strive to go beyond them to put quality and long-term viability at the heart of the agenda.

9 Becoming a strong client

Local authorities should:

- set up cross-departmental, multi-disciplinary agency teams to steer capital projects, especially where there is no existing partnership working
- establish a clear chain of communication between departments
- consider using client design advisors or design champions, especially where the centre is large and requires many integrated services
- set down a clear vision and conditions for success of the project from the outset to use as a benchmark as design progresses.

10 Involving centre users and stakeholders

One of the key findings in this report is that the involvement of centre users and other stakeholders in design development is vital to the success of children's centre projects.

Local authorities should ensure that specific time is allowed for users and the community to participate actively in the design of each building.

11 Choosing the right design team, especially the architect

Local authorities should seek to achieve best value by giving preference to design teams with demonstrable understanding of the sector – not just the lowest fee bid⁸.

12 Capital funding

A quick appraisal should be undertaken at the outset to define the best sites to use or re-use and which partners can be brought together so that full advantage can be taken of other funding.

Local authorities should seek additional funding from different internal and external funding streams to supplement the Sure Start grant.

13 Tight timetables and funding eligibility

Local authorities should ensure that timetables and the constraints built into them are communicated clearly to all parties.

14 Reviewing design quality

Local authorities should set an agenda with the designers to conduct internal client reviews of the design quality at different stages of the project.

15 Outdoor space

Local authorities should source additional funds and ring-fence funds for outdoor space and for essential refurbishment upgrades.

16 Be green leaders

Rather than wait for mandatory environmental sustainability standards in public buildings, local authorities should act now to be ahead of the game and:

- ensure that an environmental sustainability policy is put in place for the local authority area that includes a high standard for all new public buildings
- use whole-life costing analysis to ensure that facilities are both economic and sustainable
- monitor energy usage of public buildings throughout their lives to ensure that energy-saving measures can be implemented and be seen as cost-effective
- work with energy providers to discuss options for authority-wide strategies for all public buildings, including children's centres, potentially using public buildings as the basis for a community energy system.

17 Post-occupancy evaluation

Local authorities should commit to using postoccupancy evaluation to discover issues with management and stimulate continued improvement of the building.

Objectives and methodology

In 2007, the DCSF commissioned CABE to conduct a post-occupancy evaluation of 100 Sure Start centres (built mostly in phase one). The purpose of the evaluation was to:

- compile a record of what the Sure Start capital programme is achieving and how this is undertaken
- understand the quality of the buildings being provided and whether there are conclusions that can be drawn to improve later stages.

A methodology was formulated to:

- obtain the factual data for each of the centres
- gather the opinions of both users and built environment professionals on the quality of the centres
- collect factual and anecdotal information on the process of making the buildings, wherever possible.

Buildings were selected from the 'SureStart_on' database with a focus on those provided in the most deprived areas of the country, spread across the nine government regions in England and representing different building project types. A CABE enabler a built environment professional with experience of building design and its evaluation - visited each of the selected centres9. Visits were agreed with the relevant local authorities and arranged between the centre manager and the assigned enabler. The quality of buildings and their suitability for use as Sure Start premises were assessed and recorded using questionnaires to centre users and professionals, notes from interviews with users, a report from the enabler, and photographs and information about the building.

The report

Part 1

Introduction

The government is investing in 3,500 new children's centres by 2010 through its Sure Start programme. Sure Start aims to increase the level of provision of childcare in the most deprived areas of the country and to bring family services together into community-based buildings. The centres combine under-fives childcare and crèche facilities with spaces for a variety of services, such as parent training and reemployment support, family health, citizens' advice and under-threes playgroups, all provided by local authorities to help families. Often they provide a range of spaces for general use and can be seen as contemporary 'community centres' but with a much more developed provision of family-orientated services.

This research was commissioned by the DCSF and conducted by CABE as a post-occupancy evaluation. The study was completed two thirds of the way through the programme, with the aim of looking at the physical nature of the buildings commissioned but not at evidence that children are benefiting from it¹⁰. Post-occupancy evaluations are qualitative studies using building professional and building user questionnaires and concentrate on the buildings themselves rather than the quality or variety of service provision or the outcomes for the children. Looking at a broad sample of children's centres, the research concludes that on the whole they provide good spaces for childcare provision, but that many of the other elements of the design could be improved.

'Children's centres need to be imaginative, inspiring and uplifting, as well as comfortable and practical' The design of children's centre buildings needs to demonstrate an understanding of the importance both of the environment and the level of care provided to nurture young children who are away from their parents for relatively long periods of time. The nature of the immediate surroundings is very important, particularly in play areas. Children's environments need to be imaginative, inspiring and uplifting, as well as comfortable and practical. The emphasis of the design must be above all on the development of young children but also on the provision of a usable community building for local families, particularly where the new facilities complement existing childcare provision.

Encouragingly, this research shows that the children's spaces are often of a good quality, with some centres representing excellent examples of a child-orientated environment. However, with the more complex functions needed to address different service provisions, the adult-orientated areas are often in some way inadequate. Designs need to cater more for the wide and varied range of uses that are now expected to exist in practice.

The results from over 100 centres show that many centres are considered good by parents and staff, who are pleased to have new facilities. However, the architecture and design professionals – 'enablers' working for CABE on a consultancy basis – who conducted the evaluations considered the design



of very few to rank as good or excellent. There are still some improvements to be made in producing really inspiring children's centres.

The findings outlined in this report are a valuable way of determining whether the public buildings we are delivering are meeting the needs of the people using them. In commissioning this research, the DCSF has made an important step in its culture of improvement, through reflection and learning from both the positive and negative aspects of the projects funded through its programmes. Learning from both mistakes and successes is essential for all involved in building programmes. Such studies need to be thoroughly undertaken and the results made available as a future resource, incorporating regular reviews of both the process and the outcome for the users. As an essential part of a responsible, long-term commitment to improving the quality of public buildings, CABE believes that post-occupancy evaluations should be funded within local and central government building programmes and become an embedded part of the procurement process.

Respondents and enablers said that the evaluations were easy to do and centre users welcomed the study. There is great interest from participants in seeing the results of the post-occupancy evaluation and many managers expressed a wish to find out more about the opinions about their centre.

Feedback has proved an important part of the process, bringing together the expertise of users and professionals in a way that will provide a better basis for decisions and designs in future projects. It has provided insights that will help users to adopt a responsive approach to their building and its management. The feedback sheets¹¹ given to the centres include many useful and helpful comments from both users and enablers, providing prompts for improvements that could be considered in reference to suggestions in Part 5 'Sharing best practice: recommendations for designers' (page 44).



'The buildings should serve as easily accessible and inspiring environments for children, parents, carers and the local community'

Part 2

Setting the context

Sure Start children's centres

Sure Start is the government programme launched in 1999 to create the best start for pre-school children by providing:

- free part-time pre-school places to all three- and four year olds
- accessible, affordable childcare in all areas
- increased out-of-school hours childcare provision
- integrated health and family support services.

The provision of 3,500 Sure Start children's centres by 2010, one for every community in England, is central to these goals. The under-fives and their families are to receive a range of integrated services from the centres provided by the local authority and other support agencies. Conceived as a community hub for family support services in disadvantaged areas, the centres offer health services, employment and training advice and other family-orientated support. The idea is that parents and carers can access services with ease in a welcoming community environment. Many centres offer provision for preschool childcare, whilst others have drop-in and crèche facilities to complement other provision in the area.

Children's centres vary in size and type of provision, each one with a distinct range of services tailored to the community it serves. These integrated services are referred to in this report as Sure Start services. The spatial requirements and design of the centres can vary greatly from a small extension to an existing school to a larger new build centre within its own site. The buildings should serve as easily accessible and inspiring environments for children, parents, carers and the local community.

To achieve the delivery of services to the local communities as quickly as possible, the DCSF has set three phases of two-year funding programmes for building children's centres. The two-year period covers the whole procurement process site allocation and feasibility studies, involvement of local authority service providers, sourcing of complementary funding, appointment of the design team, briefing, drawing up contracts, tendering and the appointment of a contractor, followed by the construction period to completion.

Funds are based on number of child places, with reach targets¹² identified by the DCSF, and these are put together with regional multipliers. For phase one, the DCSF allocated funds on a project-by-project basis for all of the centres to be produced in that phase¹³. Architectural assessors then looked at the project in terms of value for money at pre-planning stage (RIBA stage D), which would identify any abnormal conditions¹⁴ for each site. Most of the funding came from Sure Start grants, although additional funds were sometimes provided by local authorities through regeneration, adult education and a variety of other sources.

During phase one of the programme, from 2004 to 2006, 836 centres were built in the most disadvantaged areas of England. At the end of phase two in 2008, a total of 2,500 centres had been designated.

Between 2008 and 2010 (phase three of the capital programme), a further 1,000 centres will be established. The phase three centres will be mainly extensions and refurbishments of existing facilities to provide essential consultation rooms and office provision since they will offer a less intensive range of services to supplement existing service provision in less deprived areas. There are likely to be fewer nursery facilities because most of the areas in which these centres are to be built already have nursery provision.

Objectives and methodology of this study

In 2007, the DCSF commissioned this postoccupancy evaluation of 101 Sure Start children's centres (built mostly in phase one) to:

- compile a record of what the Sure Start capital programme is achieving and how this is undertaken
- understand the quality of the buildings being provided and whether there are conclusions that can be drawn to improve later stages.

A methodology was formulated to:

- obtain the factual data for each of the centres
- gather the opinions of both users and built environment professionals on the quality of the centres
- collect factual and anecdotal information on the process wherever possible.

Buildings were selected from the 'SureStart_on' database¹⁵ from those mostly in phase one that were delivered in the most deprived areas of the country, spread across the nine government regions in England and representing different building project types. Each of the selected centres was visited by a CABE enabler – a built environment professional with experience of building design and its evaluation¹⁶. Visits were agreed with the relevant local authorities and arranged between the centre manager and the assigned enabler. The quality of buildings and their suitability for use as Sure Start premises were assessed and recorded using:

- a questionnaire filled in by an experienced professional
- a questionnaire for centre users (about 20 for each centre)
- notes from interviews by the enablers with centre users, where these could be done
- a report from the enabler with a description of the building and context
- photographs to help others understand the building and to back up comments in the report
- information on construction type, size and cost, and use of the centre. This was collected from centre staff and designers and the SureStart on database.

Enablers were asked to provide written reports drawing out any important issues relating to design and its effect on the users. Enablers initiated the distribution and collection of an average of 20 user questionnaires per centre. More than 2,080 centre users filled in the questionnaires. This represented an average of 21 per building, although there were a very small minority for whom there were few, or no, responses¹⁷.

The questionnaires looked at particular features of the centres, covering access, playrooms, outdoor spaces, adult rooms and furniture and facilities and several further general questions about the building overall. Centre users and enablers were asked to score these elements from 5 ('excellent') to 1 ('unacceptable'),

with 3 being 'not good or bad'. Users were asked about their satisfaction with the service in order to help them distinguish this issue from the questions following about the building design and were then asked for a general score representing their overall opinion of the centre. The enablers, but not the centre users, were asked about sustainability, although their opinion was based on what could easily be seen and on statements from users or designers rather than a detailed sustainability evaluation.

Findings

A quantitative and qualitative analysis could then be made of the responses across the sample of 101 centres. These are represented in Part 3, 'Findings', on page 22.

Lessons on design

Since the focus of this study is on the buildings themselves, rather than a review of the services provided, an important objective is to help those involved with phase three the design advisors, project designers and clients to understand the potential successes and issues that can arise within Sure Start projects so they can maximise their opportunities to work with centre users to create better designed facilities. The study has therefore examined a large sample and sought to determine best practice by:

- establishing why and how some children's centres are more successful than others
- passing on information about ways in which successful elements and outcomes have been achieved
- distinguishing specific design elements that could be improved
- ascertaining the reasons behind common design failings
- providing feedback to the individual centres of what is liked by users and what users think could be improved¹⁸.

These are represented in the Part 5, 'Sharing best practice: recommendations for designers', on page 44.

Process lessons

This study was also conducted for the benefit of those who evolve the policies producing capital building programmes to give them a broad picture of the Sure Start children's centres, provide insights on common trends and identify recurrent issues. Through anecdotal and factual information collected on process, the report also:

- presents an overview of the children's centres in terms of successes and common problems encountered in terms of process
- feeds back recommendations on policy to the relevant parties – the DCSF, other government departments and local authorities.

These are presented in Part 3, 'Findings', (page 22) and Part 6, 'Recommendations' (page 70).

The value of post-occupancy evaluations

This study was conducted after the buildings opened. The method for examining quality is therefore not just reliant on the opinion of one building professional, but on the experience of building users themselves.

Post-occupancy evaluations for a large sample of buildings, such as in this study, look at overall trends and problems¹⁹. This study will not address the problems of any individual building in great detail. As a more widely encompassing form of evaluation, such an approach is useful to share collectively any ideas on improvement and to avoid future problems.

This study demonstrates the way in which a simple post-occupancy evaluation can be conducted to gather systematically vital data and to provide insights on how to increase the benefits to users and the public from the provision of thoughtfully considered, well-designed buildings. Any central or local government organisation can use these methods to examine the success of a building programme or a particular building itself²⁰. Benefits arise when this is done in the spirit of learning from experience, encouraging fuller understanding of the high quality that might be achieved when aspirations are set high and processes are set up to foster excellent outcomes.

Feedback is an essential part of the process, bringing together the expertise of users and professionals in a form that will provide a better basis for decisions and designs in future projects. It aims to provide constructive insight that will help users to adopt a responsive approach to their building and its management. Ideally, a local authority would conduct a post-occupancy evaluation on every building commissioned, involving the centre heads, architects and local authority in a co-operative process with the aim of refining future designs and making improvements to existing buildings.

Four key reasons to conduct postoccupancy evaluations

- 1 Building focus to provide building designers and clients with real information on what does and doesn't work The responses of several users form corroborative evidence of specific successful and problematic features of a building.
- 2 Process focus to help clients improve the briefing process and the selection of procurement types in the commissioning of buildings It allows both quantitative and qualitative assessment of performance. This would help to develop a knowledge base that can be then used across the local authority and/or public sector client.
- 3 To raise aspirations and satisfaction of the public with regard to public buildings
 Through involvement in the process, people feel their contribution is valued, are satisfied that improvements are being made as a result of their opinions and have more of a stake in their local environment.
- 4 To promote a culture of continual improvement and best value Supplying funding bodies with a picture of what is being achieved means that they know the result of their investment and funding processes. By collecting project data and presenting findings, future programmes and initiatives can be formulated to avoid pitfalls.

Part 3

Findings

This study has revealed a wealth of information about the individual designs of children's centres and the general features that are working well and those that are lacking or problematic. As well as exploring design issues, post-occupancy evaluation shows how the programme is working on the ground and the issues coming to light for the delivery of the centres.

The findings show that the majority of Sure Start children's centres are considered good by the staff and parents and that, on the whole, the centres are serving the purpose for which they are intended. However, there are some features of children's centres that are fundamental to their successful functioning that are in many cases not being well designed or included.

In terms of process, the two-year turnaround time for delivery of new centres is proving very challenging for the local authorities and the centre heads who have to act as the clients in the building process. The speed of the process for phase one has not allowed time for buy-in by local authority service providers, who need time to form multi-departmental working groups to finalise the service plans and inform the brief. This may be improved in phase three as local authority teams will already be established and will have experience of this building type.

The programme is also not allowing for the participation of stakeholders with proper involvement of staff, parents and the community because of the short timescale. The most successful centres, highlighted in the case studies (page 34), had sought community involvement, often before the formal funding cycle had begun. This involvement (particularly of centre users) has been found to be the essential factor influencing their positive perceptions of the centres, above that of the actual quality of the building itself.

Children's centres are small, but highly complex buildings with relatively modest budgets. The study found that, consistently throughout the sample, elements such as the children's internal play areas – which are of a specified minimum size to acquire funding, and furniture and play equipment which have a dedicated separate budget – are being given higher ratings by centre users and are well designed and specified. However, those elements that fall outside of a dedicated budget, such as adult spaces (including community facilities), storage and outside play areas, are badly rated and lacking in both quality and provision. This indicates budget shortages for components that are an essential part of children's centres.

All the detailed recommendations in response to these findings are set out in Part 6 (see page 70).

Overall ratings

Key to scores

Centres were scored by both enablers and users with marks on a scale of 1 to 5 on a range of specific features (where 1 was 'unacceptable' and 5 'excellent'), then given an overall score based on the average of these feature scores.

Parents and staff think the centres are 'good to excellent'

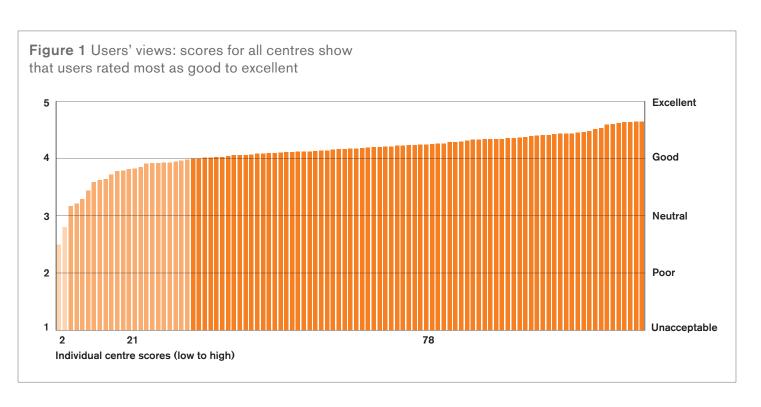
The majority of centres were rated overall 'good' by the centre users²¹. Looking at the results of 2,075 questionnaires covering 101 centres:

- 78 were rated 'good to excellent' overall by staff, parents, management and members of the public (4.16 was the average score)
- 21 centres were rated 'neutral to good'
- two were rated 'poor to neutral'

The range of overall scores (from 2.8 to 4.6) was generally narrower than that for enablers (see figure 1). On average almost half of the respondents for each centre were staff and half were parents. Parents were the most enthusiastic group of respondents, giving the centres slightly better ratings than staff.

Parents are very positive about almost all of the buildings and the benefits that they feel result from using them. They seemed particularly struck by the positive atmosphere and environment. One summed up their centre as having 'a really lovely environment – light, up to date, high quality, toys – and at the same time really relaxing, because it's so safe and child-oriented'. Another said their centre had a 'welcoming atmosphere and gives parents the chance to keep learning and interact with their children'.

A third parent summed up their impression as: 'Space. Light. Garden. Freedom to move.'



Staff were also positive, though marginally less so than parents, and were likely only to have experienced older and less well-equipped centres. One staff member in a building with an average rating described it as 'like a palace' compared to the previous nursery where she had worked.

Design quality appears to be contributing to staff recruitment and retention. 'I took the job because of my first impressions of the building and the colour scheme,' said one office manager. A centre manager considered that 'its award-winning status has helped the centre to attract and retain better quality staff'.

It also appears to be increasing their job satisfaction. A music therapist said: 'The space facilities for children and parents and the overall design of the building are a joy to work in.' And another staff member summed up how they felt as: 'Nice to be in an experimental building. Love being near the park and farm. Like level of light upstairs where I work'.

However, from the interviews conducted, the staff's attitude appears to be to make the most of what they are given. 'It is obvious that the shortcomings of the design and building are compensated for by the energy and willingness of both sets of staff to cooperate and assist each other where possible,' said one enabler.

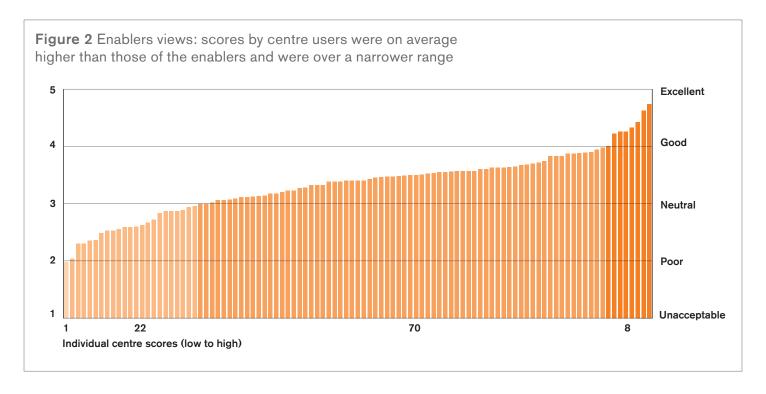
Enablers think the centres are 'neutral to good'

CABE enablers rated the majority of centres as 'neutral to good', although they considered almost a quarter of them to be 'poor to neutral'. Of the 101 centres:

- eight were rated 'good to excellent'
- 71 were 'neutral to good'
- 22 were 'poor to neutral'.

The range of scores was wide – between 1.9 and 4.7. Enablers thought that, although centres were mostly adequate, they did not show a particularly inspirational level of design.

The average rating of 3.3 – 'neutral to good' (see figure 2) – reflects the fact that the centres were found to work overall but that there was considerable room for improvement. The designs that were most appreciated had imaginative, child-friendly and well-developed ideas, but it is essential to get the basic things right first: sound construction, a comfortable environment in all respects, and the right size and arrangement of spaces. This did not happen in all cases.



Differences of opinion between centre users and enablers

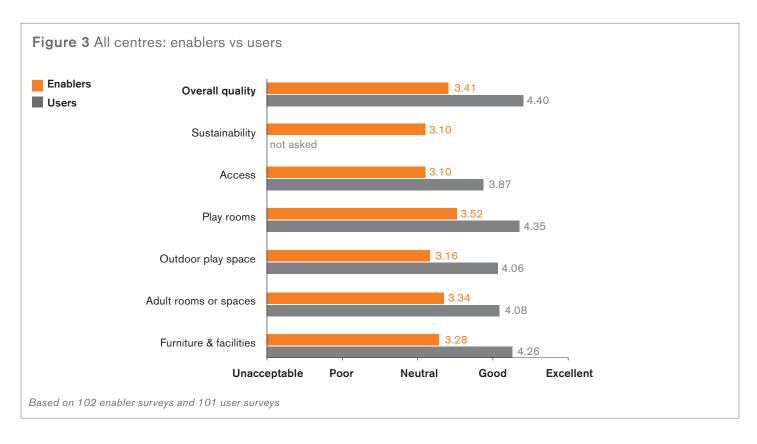
Averaging across the group of questions covering each topic, the centre users scored their centres higher than the enablers for each group by between three quarters and a whole point (see figure 3).

This difference in response is common to surveys where data from different groups of respondents is used. The results for children's centres reflect the fact that parents have the most to benefit and are therefore likely to be the most positive about the facilities, especially while they are new. Staff are slightly more critical because they have to cope with any problems on a day-to-day level but they are also glad to have new facilities (see figure 4). The professional view of an enabler, on the other hand, is likely to be moderated through comparisons of the different centres they survey, is less partial to the provision of services, and casts a critical eye over physical issues.

One enabler summed up the differences: 'Firstly it is important to emphasise what a positive contribution this building is making to the wellbeing of the community who have access to its services. The users are so grateful for what they have been given: "any problems with the building...we will deal with".

Looking at the overall profile of the results, they follow the same pattern for both enablers and centre users, but with a consistent three quarter to one point difference. A post-occupancy evaluation conducted in five years' time might yield a result more aligned between enablers and centre users, when the 'newness' of the facility is no longer the attraction.

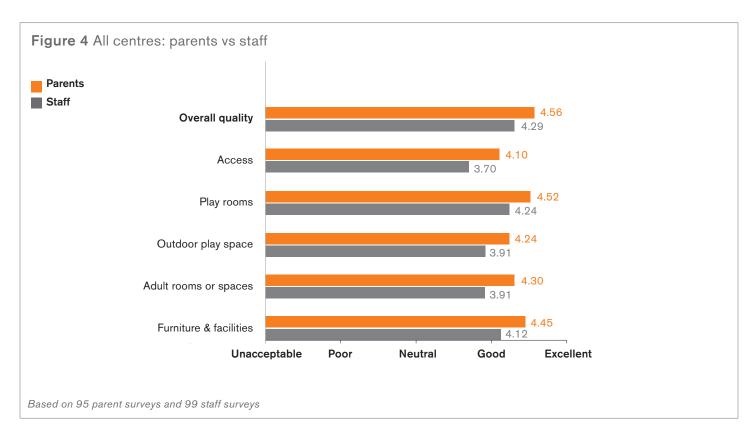
Public response to service delivery is good. Looking at the users' responses, both where they gave ratings and in the sections of the questionnaire where they wrote what they felt, it seems that parents and carers were very influenced in favour of the centres by the excellent support given to their children and themselves. The centres covered by the study



mainly serve the most deprived areas and therefore many parents and carers are unlikely to have had any similar provision before. Families who may have no outdoor space of their own at home will find the generous child play spaces especially welcome. However, praise for buildings that are seen as unremarkable by building design professionals seems surprising. This can only be explained by the fact that the staff and parents place service provision as the most important factor, with the operation and appearance of the building as secondary.

Agreement between users and enablers on the rating of individual elements

Some of the well-rated elements are not related to the building designs but to the friendly atmosphere and the play equipment and furniture. However, where ratings are given to particular features of the centres themselves there is considerable agreement between the enablers and the users, who comment unfavourably on the same things (see figure 3). Quotes from user questionnaires, from short interviews and from the comments in the enablers' reports support these quantitative findings.



The designs

A good centre will be well designed overall

Centres with a high overall rating generally achieved good ratings in all areas on the questionnaire. This suggests that the designer-client partnership was strong, leading to a better understanding of the brief, more unified decision-making and a higher final quality.

A few centres were good on the whole but had a couple of very poorly rated elements such as transport or access, which brought the overall centre score down. Sometimes these issues were fundamentally problematic, such as a small site with no car park space, and were outside the control of the design. However, this does flag up the importance of the local authority choosing the right site. This is discussed in Part 5 under the heading 'Design problems' (page 52).

See recommendations 2 and 12.

Well-rated elements

Children's play areas and babies' rooms were rated 'good to excellent' by over 90 per cent of staff and parents and over 70 per cent of enablers, both in terms of quality of space and size. Children's spaces were consistently rated better than those for adults and the community even within the same centre.

Other elements that achieved high ratings from both centre users and enablers were:

- light
- atmosphere/feeling
- children's and babies' play equipment
- children's furniture
- windows
- colour and decoration.

Areas of concern

Some design elements were repeatedly rated as poor or unacceptable. These were:

- lack of external identity, poor approach and signage
- insufficient storage throughout, with special problems being found with buggy storage and storage for flexible community spaces
- poor-quality spaces for staff and adults including community and training rooms

- absence of measures to make the building environmentally sustainable and lack of community energy strategies
- excessive noise from hard surfaces
- unimaginative, small outdoor areas with little protection from the elements and poor connections with indoor play spaces, and a lack of access to nature
- low rating for environmental comfort: bad thermal performance or conversely overheating and lack of cross ventilation
- transport difficulties (either not well connected, or car parking provision insufficient).

See recommendations 4, 7, 11 and 17.

The seven features that scored top and bottom on average are shown in figure 6 for enablers and for centre users. Features that were given a low score – 'poor' or 'unacceptable' in a substantial percentage of questionnaire responses also indicate further areas of concern. Scores of 'poor' or 'unacceptable' (see figure 5) were given by enablers in a high percentage of cases – too high for there to be any complacency about quality. Centre users were less critical in general, but their comments, in questionnaires and as reported by the enablers, covered many of the same features.

Figure 5 Scoring by enablers: features receiving
a large percentage of scores of 'poor' or
'unacceptable'

49%
49%
47%
40%
33%
32%
30%

Figure 6 Seven features scoring top and bottom ratings by enablers (orange) users (grey) Enablers Users Top 7 atmosphere 3.83 children's play equipment 3.81 play space 3.80 infant nursery equipment 3.78 light 3.69 3.60 security babies space 3.60 Bottom 7 variety of outdoor play equipment 3.00 attention to sustainability 2.89 access to nature 2.86 buggy parking 2.74 2.68 storage users comfortable 2.65 signs outside 2.62 Unacceptable Poor Neutral Good **Excellent** Top 7 atmosphere/feeling (eg cheerful-gloomy) 4.50 children's play equipment 4.49 light 4.49 children's furniture 4.45 babies nursery equipment 4.44 children's play areas 4.42 babies rooms 4.39 Bottom 7 3.94 views shelter from wind and rain 3.88 3.86 access to nature 3.86 transport storage 3.79 3.73 signs outside 3.69 buggy parking **Excellent** Unacceptable Poor Neutral Good

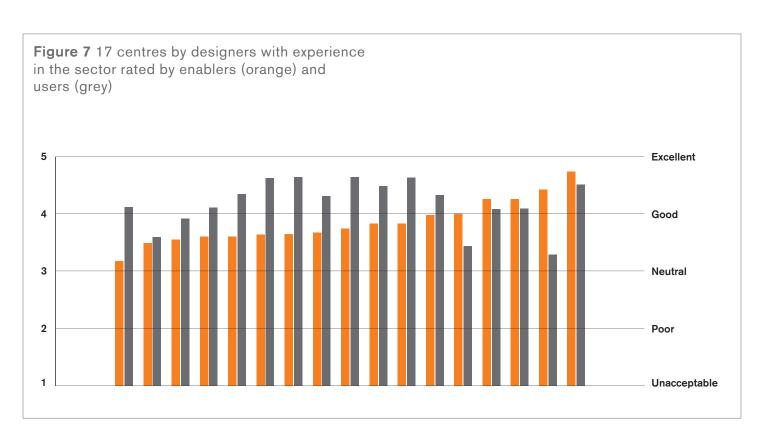
Design teams with experience in the sector

Of the 101 projects examined, 17 were considered by CABE to be designed by a team with recognised experience in the education sector.

These centres are part of the overall dataset but, if viewed as an independent group of 17 centres, their scores on all topics are higher, according to both enablers and users. The difference for the enabler scores is greater than for the users. Figure 7 shows the pattern for the 17 compared with figure 2 for all the centres. Five of the centres rated in the top 10 overall were designed by the recognised teams. This suggests that there is a strong correlation between the choice of design team and the success of the scheme.

Centres rated highly by enablers but given a low rating by users

The majority of the 17 centres were rated highly by enablers – all coming within the top 50 per cent. However, in a few cases, centres that appeared well designed to the enablers had some practical problems that led to a very low rating by users. These are particularly interesting because they highlight the value of conducting a post-occupancy evaluation. Even those with professional experience such as architects can learn from mistakes and the design understanding within the profession for this type of building can be improved once failings are identified. While design professionals may have the skills to produce buildings, they are not using the centres on a day-to-day level and will not experience the same problems as centre users, who all have very individual and specific use patterns and needs.



The buildings

Preferred procurement route

Out of 95 centres for which the procurement method was known, local authorities had used the following routes:

- 71 used traditional procurement
- 16 used design and build
- seven were partnering arrangements
- one was private finance initiative (PFI).

The PFI-procured centre was rated poorly in terms of design quality, followed by design and build, with partnering and then traditional construction being more highly rated. This suggests that for this scale of project, the traditional procurement route is the most advantageous and has proved the most successful for control of budget and quality, with partnering also showing some successful results (see figure 8).

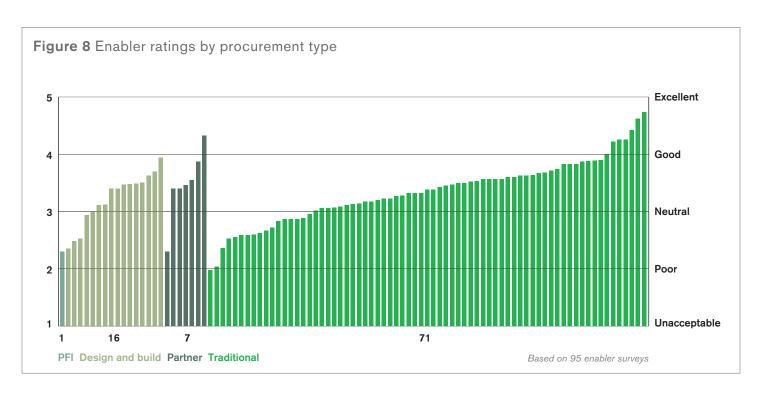
Building types

In terms of building type and size, the range is quite great. Some centres are refurbishments and extensions, some are new build using traditional construction methods and some used modular construction. The schemes included in the study were:

- 49 new build, traditional construction
- 29 refurbishment
- 14 extension
- nine new build, modular.

Figure 9 shows the ratings against build type. Modular build scored lower than other building types, although note that only nine examples were recorded.

The lower ratings suggest that special care needs to be taken with modular construction. Comments in some enablers' reports reinforce this. The different types of modular construction need to be recognised. System build, pre-fabricated panel construction, turnkey services and portable buildings all come under the title 'modular' but they are very different



construction types, services and processes. A clear assessment of the advantages and disadvantages of the different types of modular should be made available for accurate and specific appraisals of the best building solutions. Modular buildings may offer advantages in terms of speed of construction but there may also be problems with functionality, flexibility and maintenance and they can end up being as costly as a traditional construction. Projects involving them need high-quality contractors and design advisors and the limitations need to be fully understood.

The results do need to be treated with some caution as the definition for these types have been taken from the SureStart_on online database and are not differentiated by type such as volumetric or prefabricated or panelised modular. Also because each local authority enters data for their centres, there have been differences how projects are classified. For example, a scheme that is part refurbishment, part extension might be classified as refurbishment by one local authority and extension by another on the database.

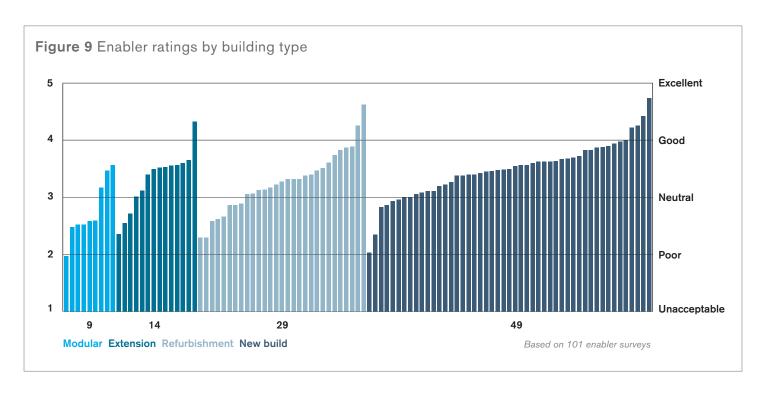
Siting

About 40 per cent of children's centres were located next to existing primary schools, either as extensions or new builds. This follows the government's agenda for extended schools and wraparound care through the co-location of facilities. However, siting on school grounds does lead to a reduction in playground space for an existing school and also to difficulties of access. For more on this, see the section headed 'Process problems' on page 32.

See recommendations 2, 5 and 15

Centre size

The maximum centre gross internal area (GIA) size was 1,645 square metres and the minimum size 35 square metres, but the size of project surveyed did not take into account existing facilities unless they were refurbished. Often a small size will indicate that the centre is supplemental to an existing facility. Size may be tightly dictated by budget and this will vary according to the catchment size of the community the individual centre serves and any specific siting restrictions.



Costs

As every children's centre is different, total costs for 92 of the schemes varied as follows:

- 38 over £1 million
- 30 between £500,000 and £1 million
- **24** under £500,000.

The higher building costs are to be expected as 49 of the centres were new buildings, often providing completely new services to the most deprived areas.

The centres costing less than £1,000 per square metre were given poorer ratings. However, it was difficult to draw conclusions on value for centres costing above £1,000 per square metre because the facts on cost and the internal floor areas were often difficult to ascertain and there were suspected inaccuracies in the reporting of the cost data²². Lack of data availability on the centres has informed CABE's second recommendation to the DCSF on improving data requirements and data collection methods for centres built under the programme.

With specified size and budget allocations, children's spaces and furniture were given priority over the community and adult functions. The overall budgets were considered to fall short of what would be required to provide things such as storage for flexible community spaces and well-designed outdoor play spaces. Local authorities have to co-ordinate funding from a variety of sources if they want the full range of community needs to be served.

See recommendations 3, 5,12 and 15

Diversity of buildings, and brief

Each centre was designed according to the needs of the local community, the available site, the service provision of the local authority and the funds available. There was no 'standard' children's centre: each is unique and will have a brief based on the area, site specifics and provision.

One of the key features of the centres is the variety of provision for which they need to cater – not just for children but also for adults. It is important that the services to be provided in the adult and community spaces are decided in sufficient time for a clear formulation of the brief and that funding is tailored to match those needs.

See recommendations 2 and 10

Building standards

Results of the questionnaires showed that, where certain standards apply, these are treated as minimum standards and are met, but not surpassed. The set standards that should be adhered to include space standards for the children's rooms, the number of toilets per child, the building regulations on disabled access or environmental and safety performance. These design standards provide a minimum benchmark for children's areas but where communal, and particularly ancillary, adult spaces are being provided, these are of noticeably lower quality and size because they do not come under any guidance. Results suggest that with the relatively small budget available to most centres, only those features that form the core requirement and those that have dedicated budgets are being provided adequately. Elements such as adult space, outside space and storage, for which there are no specific requirements or budget, are lacking in both quality and provision.

See recommendations 3, 5 and 15

Process problems

CABE enablers identified a number of process led-problems in their reports.

■ Failure to involve stakeholders sufficiently in the briefing and design process

The most successful buildings involved staff and parents in a collaborative, two-way design process, but this needs sufficient time to be orchestrated, and designers who are skilled in user participation. The most proactive local authorities will consult and engage with users prior to the start of the programme. The two-year programme provided for the Sure Start centres does not allow any time for consultation within the period for the larger building projects.

See recommendations 2 and 10

Location and site difficulties

Building on sites such as primary school playgrounds that were already owned by the local authority was common and faced opposition in terms of local opinion and planning, especially where this was for more restricted urban sites or school playing fields. Although placing the centres next to a school follows the extended schools agenda, it can also take a significant amount of

time to broker agreement with primary heads. Site appraisals by local authorities were often not carried out in enough depth or were focused either on physical constraints or service provision, very rarely both. The need to consider continued school use can lead to awkward site location with access routes that are complex and hard to navigate. Shortage of public sector land is often a barrier. The two-year programme provided for the Sure Start centres allows no time to find new sites with good prominence and access.

See recommendations 2 and 12

Complex service provision leads to difficulty in determining the brief

Preparing an accurate brief may not be possible when service provision from different local authority departments, or private providers, may not have been finalised. The brief for a children's centre is very reliant on the formulation by the local authority of a comprehensive service plan. This can provide significant challenges in creating a successful centre. If a totally different service is provided than what was originally intended, the relation of the spaces to each other and their size and location may not be entirely appropriate.

Providing sufficient and flexible space is one way of ensuring that the centre will continue to be useful for a variety of different services. However, the range of spaces needs to be quite well balanced to cater for future activities.

See recommendations 2 and 9

Uncertainty of funding

The basic funding of the children's centres through the Sure Start capital grant is not sufficient to provide good-quality adult, community and ancillary spaces. Each authority will determine any extra funding (revenue or capital) in addition to the Sure Start grant to be allocated through a number of routes due to the different services being provided. The total construction budget may not be known until the bidding process. Centre managers and designers clearly identified this as problematic and conflicting with the need to produce a solid brief early enough in the programme. The speed of the programme leads to time conflicts for client designer teams between sourcing the funding and spending time developing the brief and design. Funding from other government sources is difficult to co-ordinate in the timeframe. If sufficient extra

funding is not found, the quality of outdoor, adult and community space and sustainability suffers.

See recommendations 3, 5,12 13 and 15

Recording the process

It was not possible to draw complete conclusions on all aspects of the process through this evaluation. Process conclusions have come to light through interviews with those members of the original teams who could be contacted and some desirable facts were often difficult to obtain. Where possible, enablers interviewed both centre heads and designers, but the remit of the study was to look at the finished product. A completely thorough investigation of the process can be problematic after the building is up and running, as members of the original teams may have moved on, are difficult to contact or no longer have the information. It would be useful for future analysis if more of the process were to be recorded and that keeping an accurate record became a prerequisite for funding.

See recommendations 7 and 17

Conclusion

Although the government has committed to providing services to disadvantaged areas as quickly as possible, it is essential that the quality of the facilities is high. Most of the process issues that impact greatly on quality can be attributed directly to the funding cycle. It is having a fundamental impact on the quality of the completed buildings because:

- the period allows no time to consult stakeholders who will use the buildings
- meeting the timetable often means that sites selected are already in local authority ownership, but they may be neither the best nor most costeffective to develop
- tight timetables do not allow sufficient time for interdepartmental co-operation within local authorities to form a comprehensive service plan in time to develop a comprehensive brief
- funding timetables cannot be harmonised to gain extra funding from central government departments (such as low carbon building programme 2), EU grants, or financing from different local authority departments and thus extra funding is not being secured within the period.

Part 4

Case studies

Excellence in design supports excellence in the services being delivered at the new centres. This section consists of case studies of the most popular new centres we reviewed and illustrates what can be achieved. Case studies are very useful as a means of disseminating the lessons learnt from real projects and they can provide inspiration for future designers and stakeholders. These particular projects were included because of their success with both centre users and enablers in terms of the overall ratings.

One key to success that they all have in common is the involvement of the community in the process. Where centre heads, staff and parents are given a large stake in the project, their scores and comments are considerably more positive because they feel that they have had a good chance of shaping their environment. Knowledge of their own working practices, what is really wanted and needed, is invaluable. When such stakeholders work in partnership with the designer, a building can be produced that really answers their needs and produces a more useful centre.

Four case studies are being presented to cover different building types:

- The Lanterns: new build
- Northlands Park: new build modular on a school site
- Pen Green: refurbishment and two phases of extensions
- Westminster and Rossmore: refurbishment and extension on a school site.

There is a difference between the active involvement of users in developing the design and consultation meaning 'presentation of a scheme for comment'. When users have invested time and energy to produce something they like by being involved in an iterative process with the designers, they will continue to take a strong responsibility and involvement in 'their' building and be more tolerant of any subsequent problems.

A brief summary of key project facts is included with each case study. More details of the individual projects are provided in appendix E.

The Lanterns Children's Centre Winchester, Hampshire

New build

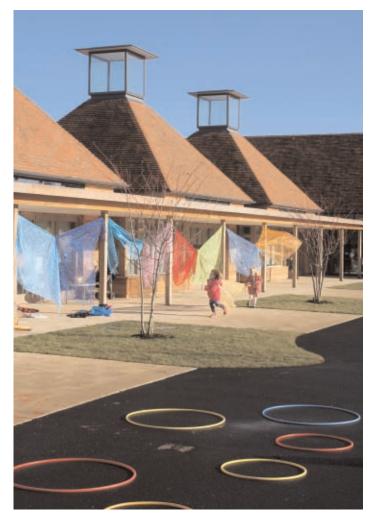
Set in a green and beautiful landscape, the Lanterns Children's Centre is immediately apparent on approach up a sweeping drive to the entrance. The distinctive red clay tile-pitched roofs create a welcoming image with red brick clusters forming a building of both domestic scale and civic presence.

Conceived of as a home from home, the designers developed an approach to materials that deliberately eschewed institutional fittings. For research purposes, the architect visited places viewing from child's eye level to test the design. The main datum of the building is the height of a child's table, establishing sill heights for the doors and windows.

Designed by Hampshire County Council's architects, the Lanterns provides an inclusive setting for underfives, integrating the care of children with special needs with therapy and parental support services. It is the realisation of a long-held ambition to provide a state of the art centre for children with special educational needs.

The architects had to persuade residents that the building would make a positive contribution to the surroundings because of the green field location. Models were used to develop and present the design over five public consultations and public opinion was won over, with the community able to forge a sense of ownership.

A tailored approach to inclusive care for young children was developed from observation. The architects visited other buildings with the client and spent time at the existing building watching children playing and interacting with parents and therapists. The diagram for the spatial organisation of the building was developed through active dialogue with the staff. This close working relationship enabled valuable input from staff on how the centre would work, and engendered in them a sense of belonging to the new centre.



'This is an example of what can be achieved through visionary investment by a local authority in its educational legacy'



The contractor was selected from a list of five in an existing council framework agreement. The contract was contract negotiated and sub-contracts competitively tendered in collaboration with the main contractor. The framework agreement meant there was an existing relationship with the contractor, who had a vested interest in maintaining a good reputation. This presented less risk than working with an unknown bidder.

Environmental sustainability was considered to a sensible degree. Although there are no set standards other than the building regulations for children's centres to achieve, the Lanterns is designed to maximise the use of daylight and natural ventilation, with high-performance double-glazing and under-floor heating to provide good energy efficiency.

Acting both as client and designer, the Hampshire team was able to give a level of care to all aspects of this project that is exceptional. In particular, the involvement of a landscape architect as an intrinsic team member meant that the quality of the external play space is noticeably high, providing a real asset for the children.

Lessons for the future

Long-term vision

Given both the time (10 years) and money (£2,500 per square metre) available, this was a once-in-a lifetime opportunity to achieve a really fantastic children's centre. The result has been a resounding success with all the centre's users. Where guidance has not been prescribed, the team has formed its own guidance and has surpassed current standards. Hampshire County Council has taken a long-term view and can now use this as an example against which to measure future centres. This is an example of what can be achieved by visionary investment by a local authority in its educational legacy.

What the Lanterns does well:

- establishes an identity and a sense of local ownership
- engenders a feeling of belonging for children, staff and parents
- forms a welcoming social hub
- creates a home from home
- responds to a child's scale and sensory awareness
- provides generous and flexible spaces in a wellconsidered relationship
- embraces outdoor life
- considers environmental sustainability
- produces a benchmark for future schemes.

How it has achieved this:

- maintaining the strength of vision of the client design team
- allowing ample time for design development and research
- having close involvement of key stakeholders
- conducting active consultation of the right people at an early stage
- nurturing a good contractor relationship
- establishing a replicable set of design principles.

The Lanterns: project facts:

- **Type and location:** new build, on a non-school site in a residential area of Winchester, Hampshire
- Project team: lead architect, interior design, landscape architect: Hampshire County Council Architects
- Total construction cost: £2,429,000
- Cost per square metre (GIA): £2,4242
- Procurement type: negotiated contract and partnering
- Sources of funding: Hampshire County Council, DfES (now DCSF) and local early years special educational needs support group.

For more project facts, see page 84

Northlands Park Children's Centre Basildon, Essex

Modular new build on school site

Northlands Park is an example of a true communityled initiative. Users and staff are generally pleased with the centre, rating it either 'good' or 'excellent' overall. Well managed, well resourced and vibrant, the centre thrives around a community café that is subsidised to serve good hot food. The centre has a reach of over 1,000 families and provides a very good variety of services.

A steering group set up to include parents and staff – the head of the centre had previous experience in procuring buildings – explored the possibilities and worked within a very tight funding deadline. The choice of a modular system responded to two issues: the ground conditions featuring had become unusable due to deep fissures, and the speed required for construction due to the short timeframe for neighbourhood nursery initiative eligibility. The centre opened only six months after construction began.

According to the head of centre, Maureen Longley, the contractor, Portakabin, was very attentive and involved the steering group in decisions on layout, particularly of the communal focal areas. Parents were taken to York, where Portakabin had a scheme, to look at progress and choose finishes. Maureen insisted on appointing a project manager who was independent of both the local authority and the contractor and this proved useful for negotiations with Portakabin in achieving a good-value contract.

Adjacent to the school playground, the centre benefits from a 'borrowed landscape' with sunlight,

views and sky. The perimeter fencing to the school site has been kept low and is made of wood, comparing well with tall metal security fencing often specified. Apart from a fenced grass and planted area, the play area is of coloured rubber crumb with large coloured sail canopies providing good areas of shade. The variety of experience for the children could be greater.

The use of a modular system has served the centre well. The speed allowed grant conditions to be met and the users are all pleased with the look of the building. For the most part, the success of the centre seems due to the intrinsic involvement of the centre users in the process.

However, circulation through the building is poorly handled and it has a lack of interest for occupants (see image below right). Alternative layouts using the same modules may have been possible with top lighting, external entry to the classes, or modulation of space, avoiding a claustrophobic corridor. With an internal corridor, the building form does not lend itself to cross ventilation. Air conditioning and fan systems have been installed at extra cost.

Adaptations to the plan of a modular building at a later date can be extremely difficult. Staff commented that Portakabin thinks the design is child friendly but users cannot supervise the layout of the room well. The centre head commented that they needed to be very clear in their briefing to Portakabin and that any subsequent change was difficult and expensive.

'The speed of the modular system allowed grant conditions to be met and the users are all pleased with the look of the building'





Lessons for the future

Enhancing a modular solution

Modular building techniques can produce a centre that is well liked, but improvements can be made. It is advisable to have an architectural consultant to work with the contractor to use the components in the best way possible. Siting and location are very important in relation to the approach and the relationship to existing buildings, the promotion of an identity for the centre, views and natural light. These are issues that architects will know how to tackle, analysing the site to discover the best location.

At Northlands Park, materials and finishes are robust but quite corporate. To make the modular system work better in this case, different materials and colours could have been introduced to enliven the space. In combination with more daylight, this would have given the centre more of a child-orientated character.

Creating a real social hub

The presence of the café as a fantastic social resource seems to have contributed greatly to the popularity of the centre. It is not just the space that is important but the provision of good-quality food, which goes hand in hand with the community functions and the physical care of the children.

What Northlands Park does well

- modular building produced a cost-effective and rapid solution for a project tightly dictated by timescale and budget
- Northlands Park is a good example of a user-led project where centre staff and parents were directly involved in project decisions
- the centre is open to the community with a great café as a social hub.

How it has achieved this

- making a careful choice of modular system type
- having an experienced centre head who was able to decide to take the project on as a direct client
- involving parents, which has meant that the major community needs have been upheld.

Northlands Park: project facts

- Type and location: modular new build on existing school site, Felmore, Essex
- Project team: project manager: Gyronita Consulting; contractor: Portakabin; centre manager: Maureen Longley
- Total construction cost: £1,011,189
- Cost per square metre (GIA): £1,117
- Procurement type: design and build fixed-price contract
- Sources of funding: lottery for neighbourhood nursery initiatives, education standards fund from local authority, landfill tax, and local businesses.

For more project facts, see page 84

Pen Green Children's Centre Corby, Northamptonshire

Refurbishment and two phases of extension

Pen Green has been a long-term project with successive waves of funding for different elements to form an early years excellence centre²³. This case study²⁴ focuses on two child-orientated projects that are part of the development: the beach and the nest. Both are bespoke designs by different architects.

Sure Start trailblazer project: the beach

Behind a new entrance, and tying the whole development together, an L-shaped, single-storey suite of rooms around a fully glazed 'cloister' corridor links with the existing nursery to form a courtyard with a 'beach' at the heart of the centre. Overall, the development is extremely successful. The beach provides an exciting and inspirational focus for the centre and a clear statement about its values: children and the importance of play and learning. It also acts as a simple and effective organiser of space: all the main activities connect and flow around the beach. which is immediately visible from the new reception area. The new building very successfully unifies the disparate elements of the existing centre to bring them together into a coherent whole. With a mono pitch alloy roof, glazing to the courtyard and white render elevations, the centre is simple and elegant.

Internally, immediately beyond the reception lobby is a lounge area – a wide and slightly ramped space connecting reception to the courtyard passage, which is fitted out with comfortable sofas and a small library. The route is transformed into an incredibly friendly and completely uninstitutional space, which is used extensively by parents and staff alike for socialising, holding informal meetings and relaxing. Spaces are all light, inviting and colourful, well suited to their activities, with good outside access and views to the courtyard and perimeter gardens.

'The new building very successfully unifies the disparate elements of the pre-existing centre to bring them together into a coherent whole'

Neighbourhood nurseries initiative: the nest

The new baby and toddler nest adjoins the existing nursery, housing a playroom. Responding to the earlier trailblazer project, the new extension is flat roofed and finished in white render. Transparent end walls connect to the small enclosed babies' garden and the main nursery garden. Along its long wall, a full-length window seat at child height overlooks the garden with views of plants, grass and trees and children playing. Small windows set in the wall above this strip window give varied and patterned light at different times of the day. Storage trolleys on wheels below this seat can be pulled out by the children to access toys and play equipment.

The baby and toddler nest is only small, but incorporates lots of really exciting and playful design. Much of it is organised to allow children to explore the spaces as independently as possible, while being nurtured to feel safe and secure, with a warm and welcoming atmosphere. The arrangement and layout of spaces is well thought out and appropriate, with a variety of light, views and spatial experience.



Lessons for the future

Continuing improvement

Despite being one of the favourite centres of parents and staff, Pen Green has had many teething problems associated with each new phase of works. Proactive centre staff have had to see the work through until problems such as those of enlarging the family room have been remedied. Further suggested improvements have arisen through carrying out the evaluation. Tackling these will be useful for the long-term development of the centre as additional funding sources become available.

The need for an overall strategy for phased work

The cycles of successive funding sources have very much shaped the project and this has allowed the centre to grow with the increasing need from the community. Piecemeal development can be very successful but would be more effective if integrated with an overall development strategy, otherwise it is easy for elements to become disjointed and produce a confusing building. Pen Green has some circulation and access issues that could have been avoided had an overall strategy been adopted.

What Pen Green does well

- a clear vision was presented for how the centre would operate and explored approaches to learning to inform the design
- the design of different areas has been able to develop in a bespoke way, tailored to the needs of the centre staff, parents and children using a responsive process
- creative design allows for fun and ingenuity of spaces suitable for children
- well-considered links allow relationships between children of different ages, community users and the natural environment, making the centre a vibrant space
- a strong community focus, the beach, which is open for use by all, makes the centre an inclusive social space that brings people together
- good relationships between internal and external spaces provide the opportunity for views, light and interaction between the spaces, unifying old and new.

How it achieves this

- the client, despite various handovers, has maintained a consistent approach, gathering experience through an iterative process for subsequent projects. This process demonstrates the essence of post-occupancy evaluation: the client was able to reflect, learn, give better input and persevere in making improvements
- incremental growth has allowed subsequent stages to be focused on a particular use. This evolution allows the details of the different areas to be very well honed and avoids a typical problem faced by children's centres: a complex brief that involves consultation with different groups of centre users
- the architects have focused on relationships between spaces from the perspectives of different users, which creates a much more socially integrated space.

Pen Green: project facts

Type and location: refurbishment and two extensions, non-school site, Rockingham Road, near Corby, Northamptonshire

Architects: Greenhill Jenner Architects: the beach; John Bovinck: the nest

Total construction cost: £1,260,000

Funding: Sure Start trailblazer capital, neighbourhood nursery initiative funding

For more project facts, see page 85

Westminster and Rossmore Children's Centre Ellesmere Port, Cheshire

Modular new build on school site

Westminster and Rossmore Children's Centre is in an area of Ellesmere Port where social and domestic issues such as unemployment and illiteracy are a concern. It provides a strong community focus for surrounding families.

The centre is one third new build and two thirds refurbishment. The new build houses community facilities and a crèche to the rear of the school, connected simply but clearly with a lower section roof. The refurbished schoolrooms house a private nursery.

The design complements surrounding buildings with a straightforward language of brickwork, large white windows and eaves, and an artificial slate roof. This creates a simple identity. Sensible detailing inside and out has led to few signs of wear and tear. Consideration of scale is evident in the use of low windows for the children. External work to the existing school building has been kept to a minimum, with new doors and windows added only where necessary.

Generous windows in both old and new parts afford good daylight. The high clerestory windows and ceilings in the old building make the internal areas feel bigger than those in the nursery, with glazed partitions bringing natural light into the core of the new building.

As with most of the centres, there are some problems: staff say that it is more difficult to maintain a

comfortable temperature in the old building as the high ceilings and old walls and roofs make the rooms chillier than in the new building. This is usually remedied after the heating has been on for a couple of hours in the morning.

Also, a general lack of storage space for equipment in the new build centre makes it difficult to keep rooms looking tidy. The private nursery in the old building, which has the benefit of fitted storage rooms is kept in impressive order.

The success of the centre has been due to the intelligent design of the wonderful green play space: a garden bounded by walls with trellises, hedges and subtle fencing, hidden from public view but linked openly and visually to the school playground. A southfacing, semi-external decking area links all the nursery rooms and crèche, with a translucent corrugated roof sheltering the children whilst playing.

Although it is modest in size, the design of the garden, deck and building integrates play, view, privacy and security whilst maintaining the possibility of flexibility, expansion and environmental control. That makes this indoor outdoor play sequence an example of achievable and practical best practice in play spaces.

'The intelligent design of the garden, deck and building integrates play, view, privacy, security, flexibility, expansion, innovation and environmental control'





Lessons for the future

Assessing suitability for refurbishment

Refurbishment can provide a good alternative to new build in terms of minimising the embodied energy used through building with new materials and can also offer spaces of unusual character. However, it also poses problems that are not encountered in new build. Often the spaces are not designed for the purpose that they come to serve. Environmental comfort can come to the forefront when considering, for example, how a crèche can function in a large Victorian room with high ceilings that requires a lot of space heating. The local authority should commission an analysis on the environmental aspects of the existing stock prior to proposals for refurbishment, as these can represent a significantly large proportion of project costs, potentially detracting from spending on other essential elements.

Whole-life costing

Improving environmental performance in an old building often requires making big changes to the physical fabric: replacing tall Victorian windows with high-performance glazing, insulating existing walls, draught proofing and installing new heating and lighting systems. Establishing an environmental performance brief prior to refurbishment, based on real energy usage and predicted energy usage, will help to gauge the potential cost. Lifetime running costs can exceed the original build budget by four times²⁵ so whole-life costing should be conducted to ensure that the scheme is sustainable. Environmental issues should be properly evaluated to avoid a long-term cost to both the community and the environment.

Flexibility of space versus suitability for function

The rooms at Westminster and Rossmore are all of a good size but the flexibility this offers has to be weighed up against the need for more intimate spaces suitable for person-to-person communication. A good brief with an understanding of potential future uses will lead to a variety of spaces and should also define the storage required for each of these. Generous spaces allow for flexibility to be multipurpose. However, accessible permanent storage is required, otherwise the space becomes cluttered.

What Westminster and Rossmore does well

- there is an imaginative garden play space that works like an 'oasis' to the area
- simple and robust construction has been used
- it provides for flexibility of use through generous space provision
- good use is made of the site with a clear location and entrance
- a good relationship has been created between the new build and refurbishment elements by using the external space to join the different parts of the scheme.

How it has achieved this

- intelligent design
- allowing a careful assessment of access round the site and the existing school
- understanding the limitations of the budget and deploying resources to maximum effect.

Westminster and Rossmore: project facts

- Type and location: extension and refurbishment, attached to primary school, in a residential area, Ellesmere Port, Cheshire
- Funding: local programme capital £184,443; devolved school contribution £20,000, Sure Start grant £553,479
- Architect: Tweed Nuttall Warburton
- Total construction cost: £768,860
- Cost per square metre (GIA): £1,496
- Procurement type: partnering

For more project facts, see page 85

The use of case studies as part of post-occupancy evaluation

Case studies are a useful means of disseminating the lessons learned form real projects and they can provide inspiration for future designers and stakeholders. Representing a snapshot of opinion, this study looks at the views of users of the new centres. In the future, those buildings of lesser quality may be seen more for their failings, despite their current popularity. This is why it is important to build post-occupancy evaluation into the ethos of building management so that more is understood about the perceptions of users and about whether quality is something that is discernable through time.

Part 5 Sharing best practice: recommendations for designers

This section covers the building design and the brief. Design teams translate the hopes, aspirations and opportunities of the policy for children and parents into inspiring and effective buildings and spaces. Their knowledge and ability to clarify the intricacies of the brief working alongside the building users, and their skill in helping ensure an effective construction programme, are of paramount importance to the success of the projects.

Clients also have a very strong influence on the outcome. That applies particularly to Sure Start children's centres because there are tight deadlines and a complicated brief. The design team needs a strong client who can make decisions and help them to evolve the brief to the required level to start the detailed design quite early on. Where the client is a centre head or manager they can help in any consultation and involvement of the other members of staff and future centre users.

The refurbishments and extensions for phase three centres should be strongly led from the point where a service plan has been developed. The client and design teams interpret the service provision into a particular spatial brief. It is important that centre managers and designers hold sufficient discussion with the different service providers and departments

such as property and asset management so that they all understand what will be needed and a steering team can be formed. Consultation with these multiagency teams needs to happen early on to incorporate their needs into the brief.

This report includes images and descriptions of the overall designs and specific elements of some of the most popular centres as a way of sharing the successes with both design teams and clients. Comments, in the users' and enablers' own words, are used to give an idea of the complexity of the issues that these buildings must deal with, despite their small size and budget, and illustrate the actual feedback received from parents and staff.

Many important lessons can be carried forward for future children's centres with the aim of continually learning from both mistakes and successes. This section aims to present the key lessons from the first two phases to assist future children's centre design teams and clients. This section aims to present the key lessons from the first two phases to assist future children's centre design teams and clients and should be read in conjunction with CABE's design guidance Every building matters and Building for Sure Start integrated provision for under-fives.

Consultation and participation

One of the keys to achieving a successful centre is to make best use of client and community involvement during the planning and detailed design process. Staff, parents and facility managers appreciate being involved and can contribute very positively to the quality of the outcome. Where consultation takes place, satisfaction is generally high but doing it well requires time and some level of expertise. Staff, and different sections of the public, may need a range of different styles of information to get a real understanding of what is being proposed. Plans and elevations do not necessarily convey information as clearly as simple sketches or models. Visits for designers and users to exemplar buildings are one of the most effective ways of sharing a real experience so that both parties can learn together.

It is important to manage expectations in this process and to be clear both about both how far user preferences and ideas can be adopted and what the reasons are for not implementing them. Users can become resentful when they are consulted but their wishes seem to have been ignored, or abandoned when the budget became tight, or when they failed to understand the implications of the designs as they were presented. If there are changes in the course of design or construction that will alter things that users had expected, then these need to be communicated and the reasons explained. Consultation must be recognised as a vital process that needs to be

conducted with care and professional skill and with enough time to do it justice.

Consultation is usually considered to be about giving users a choice of schemes but the most successful schemes actually involve future users proactively in the scheme development through participation. A good example of participation as opposed to consultation²⁶ was seen at The Lanterns in Hampshire, where staff were involved in making the layout, setting out the adjacencies by positioning the coloured squares used to represent rooms in different arrangements. Through this simple exercise they were able to test the design. Users are much more satisfied with the result when they participate because they have the chance to shape their future environment. Their participation also gives the designers and local authority a community 'buy-in' to the plans.

Comments from CABE enablers illustrate the benefits of participation – and also what can go wrong when staff feel less involved. In one case, the head of centre and some of her colleagues were involved in the selection of the design team and worked closely with the chosen architect by way of a number of informal discussions and visits to other buildings. The enabler states: 'She believes this ensured that the users' views were taken seriously and, perhaps most importantly, that they, the users, understood the constraints and possibilities within which the architects were working'.

Design successes

Elements that achieved high ratings from both centre users and enablers were:

- light
- atmosphere/feeling
- children's spaces
- children's and babies play equipment
- children's furniture
- windows
- colour and decoration.

Many designs handled particular features well. The effect at one centre was summed up by the enabler as: 'The building is inspirational. The play spaces actively encourage self-expression as they are conceived as a free-flowing space between different age groups with direct access to a shared play space. The space for each age group is defined. However, children have the freedom to move from one area to another and learn to modify their behaviour accordingly.'

Here are some the examples of successful aspects of different buildings that were noticed by enablers. Where appropriate, they are illustrated by pictures and quotes from enablers and centre users. These correlate with the 10 key points of the joint CABE and DCSF design guide for children's centres, *Every building matters*²⁷.

Natural light

Good daylight and windows that work well for views are commented on by both enablers and users and are valued. In older school buildings that are converted to children's centres, one of the advantages is often the large windows. However, the cost of bringing these into good repair and of creating air-tightness can be challenging. Even where the site is tight and views are hard to obtain, excellent daylight can be provided using skilled design and is always much appreciated. Dark enclosed corridors can be brought to life if overhead daylight is available. Natural light is the factor that influences the feeling and atmosphere of the building the most significantly: sun and shadows with lighting from different directions can animate the space.

'Very light and airy, with good visibility between rooms, and from staff areas into play areas' Enabler

'Good feeling. Light fills rooms' User

'Most striking is the amount and quality of natural light from the existing building design in comparison with those constructed today' Enabler

'The building is well designed to make use of natural light either through large windows or, in deep plan situations, through roof glazing' Enabler



Light pours down from above and in through generous windows, giving good views up to the sky and out to the playground – and a sense of connection to the outside



High windows offering less light and no views mean that artificial lights are kept on all day and spaces seem smaller, darker and unanimated

Windows and views

Where windows have been carefully considered and combined with features such as seats or entrance features they have really contributed to the internal atmosphere. Good connections between spaces are very helpful in terms of orientation and light. It also gives the opportunity to make the inside feel more spacious, as though it extends out into the surroundings. Green surroundings can enhance the internal atmosphere if the windows are planned to frame the views well. The social aspects of connections between spaces are very important to centre users and especially to the children, who are very curious and like to see other children from their level. More imaginative settings have low, intimate window seats for quiet moments. Adult spaces need views too and the best community spaces will be well connected with the outside spaces.

'The most dominant feature of the space is a continuous window seat and child-height strip window along one long wall, with views of plants, grass and trees and children playing. Small windows set in the wall above this strip window give varied and patterned light at different times of the day' Enabler



A long child's-height window makes the reception welcoming to new small visitors and presents the delightful opportunity for a display



Internalised spaces with little natural light or views do not provide a pleasant working environment

Children's spaces

Children's play spaces are where the most inspirational design has been achieved in the centres. The furniture and fittings available are often first class. The space requirements are sufficiently generous to help ensure that the playrooms can be good places for children to learn, to develop communication skills and to enjoy a full range of skill development and sensations. Use of colour, light, views, spatial separations and textures are all important. Good spaces are too often marred by problems with discomfort, noise or inadequate storage. Children's toilets have received imaginative design input in a number of the buildings.

'The hall is a beautiful room...
it has the feeling of a calm
gymnasium in the centre of a
school, and it is not often that
childcare buildings have
uplifting spaces of this quality'
Enabler

'I like the under-three room and the fact the babies and toddlers are together so that younger children can interact with older ones. I like this room; they've done well with what they had. It has good sunlight and is well lit' User



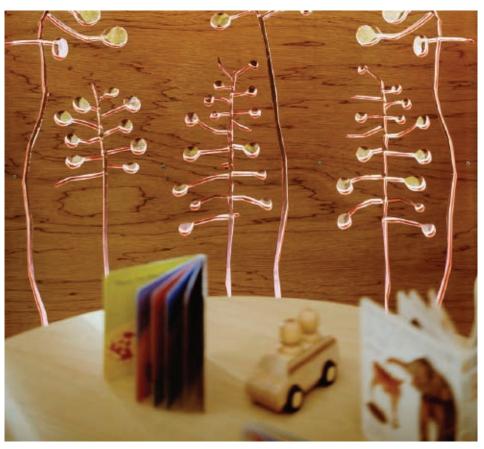
A bright play space which allows easy movement between indoors and outdoors provides ample space for play and a variety of furniture set ups



Some centres have play spaces which are not so inspiring and lack adequate storage

Furniture and equipment

Furniture and toys were found to be of a good quality in most of the children's centres. This is unsurprising as there is a dedicated budget set aside from the capital building element, which means these are not competing for funding with other essential elements. Furniture and equipment are items controlled and tested to high standards (to a British Standard or with a kitemark). Manufacturers spend a long time researching and developing their products, focusing on the needs of young children. The choice of off-the-shelf furniture is wide and manufacturers are beginning to provide products that use recycled materials. These brightly coloured pieces can be very attractive for a nursery setting and the choice can be that of the centre manager and staff.



Children's furniture can be tactile, warm and fun and used in a variety of configurations



Lack of fixed external play equipment or play features such as sand pits and water troughs reduces the physical experiences of the children, making outside play less exciting

Colour and decoration

Internal colour schemes can be neutral with highlights of colour to provide a good backdrop for the children. Often furniture and equipment may introduce colour and carefully chosen ranges can enliven the space, creating individual identities with which the children can easily identify.

Involving an artist may have many beneficial effects. Children generally delight in the colourful and tactile stimuli that may result. The entire enterprise can be used to help develop community cohesion. Imaginatively managed, local talent can be encouraged and many people can participate.

'The centre uses painted murals in the central foyer spaces and along the south boundary wall of the external play area. The imagery is communicative. The paintings seem well received by the users. They are figurative: the external wall mural is simply a painted backdrop of the seafront. The emphasis on this work seems to be about local participation and identity' Enabler

'The centre manager has engaged an artist to decorate the walls in the entrance corridor. This has been done with applied, decorated leaf shapes and leaf-shaped mirrors. The effect is quite successful and the contrast with the undecorated corridors is substantial' Enabler

'An artist was involved in the design of the external areas, and various clay structures have been included which children can climb over' Enabler



Colourful, pictorial backdrops can help to make the centres more inspiring for small children



Bad colour schemes merely look institutional

Design problems

Some design elements were repeatedly rated as poor or unacceptable. These were:

- external identity, poor approach and signage
- storage in general, including buggy and coat storage and storage for flexible community spaces
- quality of space for staff and adults
- flexibility and adaptability
- effective environmental sustainability measures
- environmental comfort and noise reduction
- imaginative outdoor areas with protection from the elements, and access to nature connections with indoor play spaces.

The effects of poor design decisions will be felt by centre users for years to come. As one user put it: 'The building has been a challenge to work in due to problems of design and poor workmanship, leading to many problems. There's shabbiness after just two years of use.'

Areas where designers and centres mangers need to take particular care when compiling the brief and agreeing on a design are illustrated below. Where appropriate, these are illustrated with pictures and quotes from enablers and centre users about good and bad approaches to particular aspects of design.

A distinct identity

In many of the centres, and especially those on school sites, it is a challenge to give them suitable separation and a distinct and visible identity. This is often a result of the need to locate them at the rear of the site where there is space for new construction. This issue is one that needs resolution at the very start of a project as, once committed to a design, problems such as a poor approach route, awkward access, unsuitable orientation, absence of clear identity and unfriendly separation may be hard to rectify. Lack of care and attention to signage, sometimes due to the absence of a budget for it, exacerbates the problem. As many phase three projects are likely to be extensions and additions to existing sites, these issues need special care.

Externally the building sits well in its context, and successfully achieves a strong, separate identity from the adjoining school. This identity would have been more strongly established if the building could have been sited more independently, and closer to the road, but this option was apparently overruled by the school governors' Enabler



Clear, colourful, bold: a good children's centre will show you what it is from the street



Some centres are not very inviting

Arrival and external signage

The identity of the centre needs to be given sufficient prominence on its site. The form of the building and position of its front entrance can aid the sense of arrival. Local, clearly positioned notices to show where to go are important. The signage may also need to assist way-finding from a distance. In some cases, while architecturally skilful, it can be too subtle. Where signage has not been provided, centres have often taken it into their own hands, although users may not appreciate its importance unless it is absent.

'The centre has no street presence. It is "invisible" from either approach. Signage is within the perimeter fence and not easily legible. The 2.1 metre-high gate gives the appearance of being locked even when it isn't' Enabler



Pictures can sometimes speak louder than words to indicate what a centre is used for



You could be forgiven for not noticing the signs on some centres that blend into the surroundings

Sequence of approach: identity on a school site

While it may often be difficult to provide an ideal approach on an existing site, it is evident that this is often not incorporated into the design as a goal from the start. Identity is achieved not by stylistic differentiation but by ensuring that the arrival route is well detailed and signed and that there is a visible destination and threshold that provides a welcome, especially to a first-time visitor. This will improve the usage of the children's centre by the community.

'Access is via a very long footpath that skirts around the school playground. The path is narrow, not well signed and is hemmed in by high mesh fencing on one side and a wooden fence on the other. It does not provide an easy or welcoming approach' Enabler

'The local approach to the building is very appealing, with child-height views – specifically a child-height window on the front corner – as well as large "shop windows" showcasing the internal activities to visitors' Enabler

'The final approach by foot is through a decked recess between two wings of the building, which provides a good transitional space that creates a confident and welcoming approach to the building' Enabler



A good relationship with the school and clear access to the children's centre is important



Approaching round the back of the school and down a long, narrow path can put families off using the centre

Security

Fences and gates need to be carefully designed and commissioned to allow the centre to feel welcoming and safe rather than institutional and unapproachable. Complicated remote control entry systems and gates and fences dominating the exterior of the building make entry into the centre difficult and are offputting. It is a significant design challenge to make centres secure whilst maintaining an attractive and welcoming feel, and few places have succeeded in this respect.

Particular consideration needs to be given to security for children's centres on school sites where there are additional problems since schoolchildren themselves may target the centre.

'The centre is a magnet for antisocial behaviour. It is easy to
climb onto the centre roof. We
have subsequently resorted to
anti-climb paint on the fence.
"Local heroes" like to sit under
canopies. Close-boarded fence
around the under-twos play
area is particularly problematic
because it provides total
privacy for anti-social
behaviour' Premises manager



Fences can be opportunities to express the centre identity and engage children



Fences can also be harsh barriers which damage a welcoming image

Entrance and reception

The entrance and reception areas are key to making the building welcoming, and to helping people find out what they need to know and how to use the centre. It is where visitors and new users gain their first impressions of the centre. There is often a café in centres that were highly commended by enablers and popular with centre users. The café forms a natural communication and social hub that is of value to the entire community. Even where this is not the case, those that provide enough space and create good visual links with important destinations in the building are appreciated.

'The reception area has a big window overlooking the car park and the fields beyond. This is a key design feature, which fills this generous space with light and connects the users to the countryside beyond. It is welcoming with enough space for seating and display areas. It has become the social heart of the building' Enabler

'The main entrance doors open automatically from outside with a push pad above child height for exit into a generous, bright and airy reception area, with views directly through into the courtyard beach' Enabler



A spacious reception can be an informal place for people to meet and the social hub of the centre



Receptions should be light, spacious and airy but some seem cramped and unwelcoming

Equal access

Accessibility for disabled users was sometimes commented on as being less than ideal, but was generally judged to be within the requirements of current regulations. Comments on these issues are largely provided from the enabler reports but they appear frequently, as do comments on flexibility for future changes, circulation, logical arrangement of the plan and adjacencies. All of these are issues that need greater consideration and will make the functioning of the centres much more successful if well handled.

'The [staff room] location means that other staff – such as nursery staff – need to circulate through the already cramped office to reach it. There is no connection between the staff room and the staff WC, which is located within the nursery territory' Enabler



Level thresholds at entrances make the centre accessible and reduces the trip hazards for young children



Long internal ramps make access difficult for all users

Logic of internal planning, circulation and way-finding

The sense of place and functionality offered by a logical set of adjacencies is essential and should be developed with the input of future users wherever possible. It is also important that the circulation and signage help to signal how the adjacencies work so that people can naturally feel at home from the start. An efficient and compact layout will eliminate or reduce the need for corridors, and money can be spent on the things that really matter.

'Both [functions] have internal central circulation routes that radiate from the reception area. As a result the centre has a fairly intelligible and clear layout' Enabler

'The layout is well considered and easy to understand, with major spaces well oriented to make the most of natural light and sunshine. Activity spaces are well organised around a welcoming and flexible social core space, flowing around a timber-clad, "free-standing" curved reception pod which punctures the external skin to express itself on the front elevation' Enabler

Where corridors are necessary, they should not be treated as merely a means to get from one place to another or be the bits left over to connect up the real spaces. They must be seen as places in their own right. As well as being a generous size, they need a destination and good light. They can be used to provide information and stimulus along the way, with consideration given to social congregation at room entrance points.

'Facilities are laid out logically, accessed from a generous, curving glazed corridor that overlooks the beach' Enabler



Generous circulation gives space for children and parents to congregate at pick-up and drop-off times



Long internal corridors with no windows or natural light are disorientating and claustrophobic

Adult spaces for parents and staff

With limited construction budgets and extremely complicated briefs. children's centres serve many functions. Provision for children is obviously a major part of the brief and it tends to dominate the ground floor plan, both for functional reasons and because there are area standards for the provision for childcare. However, offices for permanent staff need to have a good level of comfort and facilities to provide a pleasant work place. Standards, other than building regulations, do not apply to adult spaces and it is therefore important to determine that there is sufficient allowance for them in the brief and that they are provided with adequate space, flexibility, views and storage to make them attractive, accessible and functional.

'The staff facilities are generous and well liked. They have the benefit of having an outlook on a quiet corner of the playground and there is enough space to sit outside at table and chairs. Work station and kitchen facilities are accommodated in the room and all staff were positive about the room' Enabler



Staff value a pleasant, well organised working environment with connections and views



Cluttered internalised spaces are cited as problematic by staff in many children's centres

Community, consultation and multipurpose rooms

Larger community spaces need to be well proportioned and given direct access to sufficient storage to ensure that they are really flexible. Good connection with an outside space will extend the flexibility and possible range of functions. The design needs to consider the character and size of the different spaces for training, consultations and a variety of uses; some will be of a more intimate nature and some will have group-orientated requirements that should be considered. This should include the type of furniture and equipment that might be required. Times and type of use may influence where the room is located in the building as well as whether independent access is needed.

The relationship of new community facilities to an existing childcare and crèche facility can be enhanced by providing a pivotal social space, such as a café, which can create an informal and highly flexible central meeting space. These have proved very popular in centres where they have been included. If spaces are attractive and well designed, the local authority will more readily attract service providers to the centre. The service plan may change, as has been the case in some phase one centres after only six months, and this needs to be kept in mind when designating the variety of spaces and maintaining some of different proportions.

'In addition to the community room and the informal waiting space and library, there were a number of specialist rooms including a general private consultation room, a pray preparation room and faith room, a second community room [originally designed as an office], a sensory room and a three-room ante-natal consultation and advice suite. The unit manager had a midwifery background and this facility was supported by the local acute trust' Enabler

'The training room is a good space for meetings and training, with sufficient storage for chairs and tables to enable the room to be set out in a variety of different configurations. The highly glazed first-floor "garden room" and terrace attached to the training room give alternative and breakout spaces at the same time as bringing light and afternoon sunshine into the upstairs corridor' Enabler



Good community spaces can be used in a variety of ways and can expand into external spaces



Community spaces need to be well sized with independent storage if they are flexible – or they become crowded

Storage

Storage in general, and for coats and buggies in particular, was criticised. Around 20 per cent of the users rated it 'poor' or 'unacceptable', as well as nearly half the enablers. Storage is often cited as lacking in many building types but it is critical to the effective functioning of any space. It is particularly important where children are being cared for in facilities that cater for many varied and often part-time activities. Special types of storage, such as for buggies and children's coats, are frequently felt to be inadequate but general storage is also often underprovided. External storage was also rarely provided.

Storage that works will not make a major impact on the space and may not be remarked upon. If it is missing, even the best places become untidy and unloved or at least frustrating. As a general rule, for a building to perform efficiently as a multifunctional, flexible environment, it will need sufficient storage to serve all the different uses.

'Storage in the childcare spaces is good. The under-ones and one-to-twos rooms share a large walk-in store with both internal and external access' Enabler

'There is a dedicated buggy store inside the entrance doors adjacent to the parent's room, which is secure and accessible' Enabler

'The additional features include a bench seat and storage unit placed on the outside wall enclosing two long horizontal windows, one at low level' Enabler

'The playrooms are generally really good, light is good but overall the detail was poor. We had to raise all the work surfaces in the room to get appliances under them and storage wasn't thought through very well' User



Storage for children can be fun



If no storage is provided other spaces become unusable

Flexibility and adaptability

Flexibility is needed in everyday use because of the variety of activities within the centres. Adaptability is also needed over the longer term as these buildings will serve their communities for a long time. The needs of each community may well change and funding and support mechanisms may also dictate alterations in how they are used in the future. Most buildings are in fact adapted over time, presenting a good opportunity for improvement and growth – is the centre 'agile' enough to take advantage of any future investment?

For individual spaces, folding walls are not necessarily the most practical device to consider, and they may have shortcomings acoustically. Sufficient space, good logic to the layout and a construction system that allows for change are all important considerations. Even after only a few months, many changes take place and indeed are often required because the original brief could not anticipate the exact needs or changes that could take place over time.

'The general layout of the nursery, the provision of a variety of child-scaled spaces, the consideration of natural light and sunlight, the relationship (views and access) with the outside are all exemplary – and have allowed for flexible use as child numbers have changed' Enabler

'This is the smallest children's centre I have worked in but it is the most flexible. The designers have done a good job' Centre manager

'The interview room was designed for one-toone consultations with parents. This has
subsequently been appropriated as overspill
office space for staff. This is due to limitations
of space and privacy in the main office. It has
now been re-branded the "resource room" and
staff hot-desk with laptops as required. This
room is also sometimes used for private
consultations with individual members of the
public. It includes advice leaflet storage to
support this. To date, the health room is not
being used for health examinations because of
lack of health staff. Instead it is being used for
the services intended for the interview room –
Jobcentre Plus and benefits advice' Enabler



The children's space can be laid out in a variety of ways and still work well



Using folding screen and sliding room dividers is not often a good way of achieving flexibility

Environmental comfort and noise

Overheating, lack of ventilation and noise often posed problems. Issues to do with comfort were raised by centre users as well as by the enablers and arose for a number of reasons: inappropriate planning, inappropriate location of openable windows and heating systems that did not function as they had been designed to. Many users were also critical of the lack of sheltered play space outdoors.

Environmental comfort needs to be considered very seriously. Young children in particular are more vulnerable to temperature variations and their physical comfort is very important. Particular care should be taken to avoid overheating through southerly orientation, large amounts of glazing with no shading. North light from overhead can provide an even level of daylight to supplement any low-level windows.

Noise attenuation in the building fabric cannot be forgotten. Measures to reduce noise can often be combined to make an attractive feature for the centre such as those in the form of overhead 'floating panels' in interesting shapes and colours or softer display boards for the walls.

'Little or no air movement in the corridors.

Upstairs where our partners are is like a furnace.

We've had to introduce opaque film to the front windows for sun control and privacy. Under-floor heating ok as an idea, but it's much too hot, we don't seem to be able to control it' Centre user

'Noise levels are high, due to reverberation as surfaces within the play space are very hard. Staff complain of headaches after a long session in the nursery' Enabler

'The noise level of all extract fans is extremely high and should be condemned. The staff all mentioned the startled children as it is automatically switched on together with the lights, under passive infra-red (PIR) sensors' Enabler



Good acoustics can be achieved in creative ways



Bad lighting and hard surfaces make environments for children particularly unwelcoming

Environmental sustainability

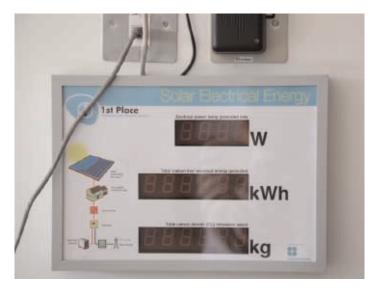
Sustainability in terms of environmental performance was not given a high score in most buildings.

Enablers were asked to see whether there were energy, water or waste saving design features, or evidence of material specification focusing on environmentally friendly choices. This was dependent on their brief inspection and on information gathered either from users or designers about these features, so their assessment is an opinion that is not based on data for energy use or on building specification or contract information.

However, they judged that design elements aimed at environmental sustainability often focused on meeting what the regulations demand with no attempt to create better solutions. It seems that separate government funds available specifically for sustainability in public buildings have not been accessed29. The complexity of the delivery process is not allowing a harmonisation of timescales by the local authorities to acquire these funds. In some cases, sustainability measures both in terms of design and implementation by users were actually leading to wasted energy and/or uncomfortable environments. The EU requirement for energy performance certificates (EPCs) will only be aimed at larger public buildings - those over 1,000 square metres, so children's centres will, for the most part, not be monitored for performance even when the legislation is introduced in October 2008. As community hubs, it could be conceivable that children's centres could be net exporters and form part of a community-wide energy strategy, but this is not happening.

'Sustainability in the sense of energy efficiency seems to be not very present. There is a small solar collector mounted on the existing south-facing roof. Solar gain collected by the south-facing glass conservatory causes problems of overheating and environmental distress. The new extension seems to prevent cross-ventilation through the centre. The extension has created a deeper plan, which exacerbates problems of inner-room situations trapped between the existing schoolhouse and the new glazed extension' Enabler

'The downside is the issue of environmental comfort. Since it is an old building and does not in theory have to comply with new building regulations, the windows are single glazed and the heating is a somewhat anachronistic blown hot-air system. Although the users were not aware of the relative running costs, this system is probably extremely inefficient and costly to run' Enabler



Visible monitoring of solar energy involves centre managers in control of energy use



Complicated services which are badly integrated do not contribute well to environmental sustainability

Outdoor play

Children enjoy outdoor play immensely. It provides all the possibilities for learning and achieving that indoor play can but is of a much more physical nature, encouraging children from a young age to be healthy emotionally and physically. Through research, evidence has been established linking physical movement to the development of motor skills in the brains of children under five. There is a window of opportunity represented by this period in a child's life, when positive experiences are most beneficial in the developmental process. Outside play has a variety of benefits developing physical strength, co-ordination, agility and dexterity, and stimulating sensory experience, as well as encouraging imaginative development, selfconfidence and emotional wellbeing.

As outdoor areas are particularly important for young children, these should always be considered an essential part of their playing and learning environment. Sheltered space for outdoor play in wet or hot weather and as a transition between inside and outside is an important feature. The connection between the internal and external play spaces should allow fluid movement. Permanently covered areas can provide ideal locations for messy play such as with sand and water. The appropriate separation of age groups, with different-sized equipment, will allow babies the opportunity to experience being outside in safety. Children's centres with the most successful feedback have provided contact with nature and greenery and included imaginative permanent play equipment.



External areas can be conceived of as gardens: soft, green with natural materials and grass. Children experience nature through a variety of senses with plants such as lavender, tactile wooden play equipment and elements such as sand and water



This un-child friendly environment with dangerous stones, artificial turf and plastic play equipment doesn't allow contact with nature

In the less satisfactory situations, the outdoor spaces seem like smaller versions of school sports areas: blank tarmac or rubber crumb with equipment moved out and in each day, and no planting. Unfortunately, money is often diverted from the original budget for outside works when funds get tight, so the areas often have to have remedial works later in the life of the centre. This can be taken as an opportunity for centre staff, the parents and the community to be involved by helping in various practical ways and can, if organised well, mean that local people feel that they have a stake in the centre. A clear and phased development plan for the external space can help organise and prepare centre staff and parents even when the funds are not immediately available.

'All day-care rooms open directly onto an external play area and each room has a large. covered, transitional play space between inside and out. These covered play areas are within the overall roofline of the building, and in each case a steel shutter at the external building line allows these covered spaces to be secured at night. This has the double benefit of protecting the large areas of glazing to the playroom elevations, and enabling toys and equipment to be left in situ overnight' Enabler

'The outdoor area is lovely – nice and big. Has been improved post-contract – additional equipment, shade canopy and growing area' Nursery manager



A variety of textures and colours combines well with a sequence of natural elements: existing trees are made into fun features to complement play equipment



A vast tarmac play area does not offer many sensory or stimulating opportunities

Recommendations for designers

The comments from enablers contain many helpful suggestions for the individual centres that they assessed. This section lists points raised by enablers as potential ways of improving the procurement process as well as the actual design of individual centres.

Enablers suggest improving the briefing and design process to get the basic requirements fully understood, reinforcing the need for adequate time spent early in the project.

Involving centre staff and local authority clients

- go with clients to look at good buildings, look at wider examples of excellent buildings and at case studies of children's facilities
- involve centre staff during design they may be able to suggest things that will avoid future problems and they have an excellent understanding of important operational detail
- use models, sections and 3-D visualisations in conversation with client groups to avoid disappointment, for example in the quality of light or accessibility of outside space, that lay users may be unable to anticipate from plans
- use visits and models and help clients understand the positives and negatives of their own existing buildings. It is important to manage user expectations and learn from their experience The design quality indicator²⁸ is a useful tool and can be used on visits as well as when considering the project brief
- canvas the client to ensure that a well-considered brief has been prepared to include a full description of services and intended educational provision.
 Refurbishments and extensions for phase three centres should be strongly led from the development of a service plan that will be interpreted into a particular spatial brief
- consult with the future maintenance team about what will be acceptable. If necessary, agree new materials and fittings to go onto the approved list.

Internal

- more buggy and pram space is always needed than is assumed. It is vulnerable to interference if not protected. It may be useful to provide shelves to store loose items
- give views into and within the building wherever possible
- avoid long internal corridors with no natural light
- design inspiring and imaginative layouts for the spaces as the plan develops. Explain to the staff how to do likewise when making regular layout changes
- consider high-level windows or roof lights to give adequate daylight in large and/or deep spaces
- allow ceiling height variation to suit the size of spaces and rooms
- use colours to differentiate areas, but in children's spaces take care not to dominate opportunities to display their own creations
- consider kitchen facilities to support different spaces and provide more informal opportunities for people to socialise and make and share drinks and food.

Comfort and sustainable use

- an integrated, sustainable approach to design, construction and environmental servicing is needed from the start of the design process
- check that funding availability for sustainability purposes has been researched. There are government initiatives²⁹ to achieve sustainability in public buildings and these resources are not always harnessed
- create an energy reduction action plan including targets and a checklist for staff training, for example switching lights off and use of the heating and ventilation controls
- individual control for heating within rooms, or even a zoned control system, can be considered. The extra costs of a better system can be recouped in savings to energy costs over a relative short period
- provide interestingly planned and laid out electric lighting – avoid regimented grids
- cross-ventilation is highly desirable but low-level, outward-opening windows can be dangerous obstacles for children

 night-time cooling using natural ventilation needs to be carefully thought through as open windows can present security problems.

External

A good-quality outdoor learning and play space is essential for every scheme. This should be imaginative and playful, with opportunities for a variety of experience.

- keep any children's spaces close to outside play areas and consider using wide, openable doors to encourage transition
- think carefully about variety of texture and experience externally³⁰
- a moveable or retractable canopy can provide covered outside activity space which will significantly extend the play experience for children in all weathers
- think about imaginative play features that encourage role play and outdoor learning as well as wet and messy play.

For phase three briefs

- consider improvements to the whole sequence of approach to the building, including footpath and footway treatment, boundaries allowing some views through using appropriate security gates and fencing, landscaping and artworks to the entrance areas, and a welcoming doorway with some shelter from the elements
- think about incorporating signage into the design of the building to provide essential identity and to avoid unsympathetic later additions
- check at the briefing stage what needs to be stored and plan the storage in detail to be sure there is enough – both for children's and adults' areas.
 Many items are large and awkward. Provide space for storage for various different users if the building is to be used flexibly
- for future adaptability, if there are elements that cannot be included due to budget restrictions, try to anticipate how they may be added to the building in the future
- investigate what activities are planned for the community and multi-use spaces and imagine the facility being used at different times of the day and evening by different user groups
- consider a variety of room sizes to cater for more and less intimate activities
- ensure that larger, more flexible spaces have direct access to a large enough storage area to be successfully multi-use
- if considering using modular building to take advantage of their speed of construction, ensure that the designs relate to the functions to be accommodated. Repetitive shapes and volumes that are easily configured may not always be suitable. Be aware of the problems that may arise with lightweight structures and that changes may be expensive once the building is completed.

Part 6 Recommendations for central government and local authorities

The recommendations emerging from the research cover the process of delivering children's centres and are also intended to inform policy for future capital programmes. They relate to the different roles involved in delivery and are aimed at anyone in central and local government concerned with public building programmes.

We need to aim high to provide the people these programmes are intended to benefit with the buildings they deserve. The impetus to aspire beyond minimum requirements for any programme must come from the very top: the minister and senior civil servants responsible, and the chief executives in local authorities or other organisations involved in providing children's centres.

Recommendations for central government and the DCSF

The government's common minimum standards³¹ for the public built environment should be encouraging local authorities to adopt good practice in procurement. However, many of the problems encountered show that this is not happening. Many of the recommendations below are addressed within the standards; but the standards do not go far enough to ensure that quality is the key consideration above cost-effectiveness, and nor are the standards mandatory for local authorities. For improvements in the quality of all public buildings, there needs to be a fundamental shift away from speed and cost being the main driving factors in decision-making. Future large-scale capital building programmes should put design quality and long-term viability at the heart of the agenda.

Focusing on control over funding, information and the wider process under the Sure Start policy, the recommendations for the DCSF and government are as follows.

1 Long-term quality

The government should review its common minimum standards and:

- extend their mandatory status to local authorities and other bodies delivering public buildings
- ensure that long-term quality is the prime consideration above cost-effectiveness.

2 Consultation and preparation

Consultation is crucial and leads to better designs and more satisfied users. This study suggests that a children's centre will be more successful and receive higher ratings where there has been active user participation in the design and where the community has made decisions about it. Time for user involvement is not included as part of the programme and the two-year period is barely sufficient time in which to get the larger centres built.

The short timeframe left insufficient opportunity for teams in phase one with little experience of capital projects to spend the right amount of time on the early preparation stage and to become familiar with each other and the project constraints.

The government should:

- allow sufficient time for local authorities to purchase new sites and do feasibility studies of existing sites
- include time in the programme for the establishment of new teams requiring interdepartmental co-operation within local authorities: these will take time to start to work together efficiently on new programmes
- allocate specific time for stakeholder involvement as an integral part of the programme.

3 Funding

Even slight under-investment is costly in the long term as it limits the potential of the children's centres. Current funding is not sufficient overall and as a result adult and community spaces are not as good as they should be. Local authorities are having to find supplementary funding to ensure that the centres can meet the needs of the community as intended. Separate funds are available from different government departments, granted on different criteria and timescales, but these are proving too complicated to obtain – for example the low carbon building programme 2 is not being accessed by the majority of public building projects and the fund is under-utilised.

Funding issues, including uncertainties and changes in funding availability, are cited anecdotally as reasons why poor decisions are taken. The government should:

- ensure funding to provide long-term quality in terms of community resources as well as children's spaces
- maintain consistency of support to local authorities: changes in departments and policies are detrimental to long-term projects
- harmonise funding timetables between government departments to allow flexibility for local authorities

to be able to secure the full range of funds for public projects and channel funding for capital projects through one source.

4 Design quality

Building a design quality assessment into the process would help to minimise strategic mistakes and establish key priorities.

The government should ensure that a design quality rating is built into the assessment procedure used by its technical advisors at the briefing stage as well as in the assessment of tenders and on completion.

5 Outdoor play space

Following the Children's Act 2004 and the Every Child Matters agenda, which states that all children should be healthy, and enjoy and achieve, the DCSF has set out the children's plan. One of five key points of the plan is to provide more places for children to play safely. Investment in public playgrounds shows recognition of the real benefits of play. However, the plan does not go far enough and does not address the issue of providing good-quality play areas for children's centres, primary schools and secondary schools, where children spend the majority of their time. The Greater London Authority is now recommending that a minimum of 10 square metres of outside space per child be included in all new residential developments in London³². This should be matched by a minimum provision for all new facilities for children's day-care and education. It is not just quantity but also quality and variety of experience that need to be addressed. Existing facilities should be assessed and brought up to meet a new standard.

The government should set minimum standards for outdoor play, and consider funding this separately to achieve a high-quality play space for every children's facility.

6 Environmental sustainability

The government has set a deadline for all new public buildings to be zero carbon by 2018. However, significant steps need to be taken now to work towards this. At present, BREEAM assessments are required for schools, courts and prisons but not for other public buildings.

Looking at the BREEAM method itself, it covers some sustainability factors but should be reviewed to include the energy usage of appliances as well as water usage³³. This could make significant reductions in energy usage and CO₂ emissions.

Projected usage should be quantified when systems and appliances are being specified, to form part of a whole-life costing by local authorities at award of contract stage. This would encourage a sensible investment in sustainable design through capital expenditure.

EU energy performance certificates will start to introduce a greater transparency in the use of energy in public buildings in October 2008. However, public buildings smaller than 1,000 square metres, including children's centres, will not be subject to this legislation. Public buildings need to have consumption targets to reduce energy usage in the sector.

Also, community-wide energy systems are not being considered during the development of public land.

The government should:

- set environmental standards as a requirement for all public sector procurement, including through local authorities and healthcare trusts, with targets of BREEAM 'excellent' for new build, and 'very good' for refurbishment
- measure and monitor consumption using an established common method, set consumption targets, ensure that these are achieved, and publish data for all public buildings
- make whole-life costing mandatory for procurement of public buildings and publicly report the data on whole-life calculations.

7 Monitoring quality

Continuous improvement of the quality of public buildings can be achieved if the capital process begins with an evaluation of what works well: by collecting project information, by collecting process information and by testing user satisfaction.

This means that standard methods for collecting a range of basic information should be implemented across all public building projects. Project information, particularly costs and net internal areas, should be accurately collected by a qualified individual (such as a chartered surveyor) for an easy assessment of value for money and statistical analysis. Information on process factors should also be gathered, such as how the brief was arrived at, what design advice and support were used and why the procurement route used was chosen. This would help to identify why problems occur and suggest how the same mistakes can be avoided in future projects.

Analysing quality of outcome should become an intrinsic part of the process through post-occupancy evaluations. This would increase user satisfaction and assist managers of public facilities in making improvements. The concept of market testing is already an inherent part of any commercial product or service development, but has yet to become common practice in the public sector with regard to building projects. Long-term benefits and cost savings will snowball if an efficient and easily usable set of practices are put in place.

Continuous improvement in the quality of public buildings can be achieved if the capital process begins with an evaluation of what works well. The government should:

- require design teams to submit accurate and comparable project data at the end of schemes
- introduce a procedure to log the procurement processes involved for all capital building projects
- make post-occupancy evaluation a condition of receiving capital funding for future projects.

Recommendations for local authorities

Local authorities act as the client alongside the users and have control over their own local interpretation of the process and the amount of support they provide to it. They will be responsible for the continued maintenance and running of the facilities, and the success of the policy for children and families in their area is dependent in part on the successful design of these facilities. Through the evaluation, it has become evident that best practice for procurement as described in the Office of Government Commerce's (OGC) common minimum standards³⁴ is not being adopted by local authorities. CABE is urging the government to make these standards mandatory, but they should become common practice within local authorities for the successful delivery of public building programmes now. With phase three of the children's centres underway, the recommendations below are principally aimed at reinforcing and detailing some of the practices outlined in the standards that will make the existing system work better for local authority clients.

Our recommendations for local authorities are specifically as follows.

8 Best practice in procurement

Merely adopting best practice standards will not

go far enough to ensure that design and building quality is valued above cost-effectiveness or speed of delivery. A fundamental shift in thinking is needed to ensure that public buildings are procured in way that delivers the best quality long-term solution.

Local authorities should use the OGC's common minimum standards³⁵ as a basis for best practice in the procurement of all public buildings but strive to go beyond them to put quality and long-term viability at the heart of the agenda.

9 Becoming a strong client

Local authorities should undertake skills audits to ensure that key skills are available for delivery of the project. Special assistance should be sought for staff teams not familiar with being clients for building projects or with children's centres as a building type. This assistance could include using client design advisors or design champions³⁶.

Decision-making needs to connect with the right level in the local authority. A very small team consisting of members from education, finance, property and planning departments can be overwhelmed and be constrained in what it manages to achieve. However, design champions need to be able to connect the delivery team effectively into the broader strategic decision-making and management structure of the organisation.

Children's centres involve several different departments, so local authorities need to seek broader involvement of all partners in developing the overall vision and specific brief for the service plan and building.

Local authorities should:

- set up cross-departmental, multi-disciplinary agency teams to steer capital projects, especially where there is no existing partnership working
- establish a clear chain of communication between departments
- consider using client design advisors or design champions, especially where the centre is large and requires many integrated services
- set down a clear vision and conditions for success of the project from the outset to use as a benchmark as design progresses.

10 Involving centre users and stakeholdersConsultation should not be merely a generic, roll-out formula for obtaining public consent. One of the key

findings in this report is that the involvement of centre users and other stakeholders in design development is vital to the success of children's centre projects.

Local authorities should ensure that specific time is allowed for users and the community to participate actively in the design of each building.

11 Choosing the right design team, especially the architect

This is very important even when there is an existing framework agreement because very often there is no additional client advisor for a children's centre. CABE's publication *Creating excellent buildings*³⁷ offers advice on choosing the design team³⁸.

Local authorities should seek to achieve best value by giving preference to design teams with demonstrable understanding of the sector, not just the lowest fee bid³⁹.

12 Capital funding

A quick appraisal should be undertaken at the outset to define the best sites to use or re-use and which partners can be brought together so that full advantage can be taken of other funding. Local authorities should investigate whether the project can link up with the primary capital, primary care trusts or building schools for the future programmes. Funds from a variety of external sources can be sought, for example from local private enterprise and the low carbon buildings programme 2 and EU funding for area-wide regeneration schemes⁴⁰. Whole-life costing should be adopted to ensure that the funding takes into account short-term capital expenditures against long-term gains.

Local authorities should seek additional funding from different internal and external funding streams to supplement the Sure Start grant.

13 Tight timetables and funding eligibility

There is more pressure at the briefing and feasibility stage and this makes inter-departmental co-operation harder. Other departments within the local authority and key teaching staff on site need to understand the rapid timetable and its impact on their own programmes.

Local authorities should ensure that timetables and the constraints built into them are communicated clearly to all parties.

14 Reviewing design quality

Reviews at the briefing, outline, planning, scheme and tender stages are important to ensure that the project meets its original aspirations and the client vision is maintained. Set some key gateways or milestones with the design team and ensure that high design quality is met at these stages.

Local authorities should set an agenda with the designers to conduct internal client reviews of the design quality at different stages of the project.

15 Outdoor space

Outdoor space and essential refurbishment upgrades often suffer from budget over-runs in other parts of the project. This can lead to disappointed centre users and the requirement to do further work very soon to rectify problems.

Local authorities should source additional funds and ring-fence funds for outdoor space and for essential refurbishment upgrades.

16 Be green leaders

Rather than wait for mandatory environmental sustainability standards in public buildings, local authorities should act now to be ahead of the game and:

- ensure that an environmental sustainability policy is put in place for the local authority area that includes a high standard for all new public buildings⁴¹
- use whole-life costing analysis to ensure that facilities are both economic and sustainable
- monitor energy usage of public buildings throughout their lives to ensure that energy-saving measures can be implemented and be seen as cost-effective⁴²
- work with energy providers to discuss options for authority-wide strategies for all public buildings, including children's centres, potentially using public buildings as the basis for a community energy system⁴³.

17 Post-occupancy evaluation

Evaluations are increasingly being adopted by leading organisations as a way of saving resources and achieving value by avoiding unnecessary mistakes. They increase the level of responsibility and sense of ownership that the occupants feel for their building.

Local authorities should commit to using postoccupancy evaluation to discover issues with management and stimulate continued improvement of the building.

Notes

1 A separate report, *The national evaluation of Sure Start*, which focuses on the outcomes for children, has been researched by the Institute for the Study of Children, Families and Social Issues, Birkbeck, University of London at www.ness.bbk.ac.uk

A summary can be obtained via the Sure Start website. Go to www.tinyurl.com/5ovtd2

- 2 Centre users consist of staff of the Sure Start services, childcare staff, centre heads and managers, parents and members of the public who use the centres
- 3 Early years excellence centres were established in the late 1990s as forerunners of children's centres
- 4 A further, more detailed case study of Pen Green can be found at www.tinyurl.com/5lexyv
- 5 The Office of Government Commerce's common minimum standards are available online at www.tinyurl.com/3kou3w
- 6 The current BREEAM assessment method does not require a target consumption to be achieved, only to be set. Some local authorities such as Leicester are implementing their own monitoring of public buildings and this has proved beneficial in understanding and reducing consumption and expenditure. EU energy performance certificates will only be need for public buildings over 1,000 square metres; often children's centres are smaller than this
- 7 The OGC common minimum standards for local authorities guidance is available online at www.tinyurl.com/667cre
- 8 This may not be relevant to local authorities where there is an existing architecture department
- 9 All the enablers carrying out the post-occupancy evaluations are professionally qualified in a relevant field such as architecture, surveying or project management
- 10 A separate report, *The national evaluation of Sure Start*, which focuses on the outcomes for children, has been researched by the Institute for the Study of Children, Families and Social Issues, Birkbeck, University of London at www.ness.bbk.ac.uk

A summary can be obtained via the Sure Start website. Go to www.tinyurl.com/5ovtd2

- 11 Samples of feedback sheets for two centres are included in appendix D
- 12 Reach targets are intended numbers of potential centre
- 13 For phase two and beyond, local authorities are given an overall capital allocation and a series of reach targets and it is down to them to allocate the funds to each centre
- 14 These are sums given for unusual circumstances, such as poor ground conditions, which need added funds
- 15 SureStart_on is the DCSF Sure Start capital projects database by E C Harris Ltd
- 16 All the enablers carrying out the post-occupancy evaluations are professionally qualified in a relevant field such as architecture, surveying or project management
- 17 This could have been due to centres not being in operation at the time of the study

- 18 Two examples of feedback sheets provided to the centres are included in appendix D
- 19 Types of post-occupancy evaluation can vary from technical performance assessments of building systems to qualitative studies
- 20 Refer to the Usable Building Trust guidance on postoccupancy evaluation available on www.usablebuildings.co.uk
- 21 Centre users consist of staff of the Sure Start services, childcare staff, centre heads and managers, parents and members of the public who use the centres
- 22 The cost data was obtained mainly through the SureStart_on database, entered by different local authorities directly and there may be variations in consistency. See the section on 'Restrictions' in the methodology at appendix B
- 23 Early years excellence centres were established in the late 1990s as forerunners of children's centres
- 24 A further, more detailed case study of Pen Green can be found at www.tinyurl.com/5lexyv
- 25 This statistic has been sourced from 'New tricks with old bricks: how re-using buildings can cut carbon emissions' a report by the Empty Homes Agency
- 26 Refer to appendix F for further reading on consultation and participation
- 27 CABE Every building matters www.cabe.org.uk/publications
- 28 Available at www.dqi.org.uk
- 29 The low carbon buildings programme 2 offers up to 15 per cent of the project value for micro-generation for public buildings. It is offered by the Department for Business, Enterprise and Regulatory Reform see www.lowcarbonbuildingsPhase2.org.uk
- 30 CABE's *Building for Sure Start integrated provision for the under-fives* has suggestions for high-quality and varied landscaped spaces. See guidance in appendix E
- 31 The Office of Government Commerce's common minimum standards are available online. Go to www.tinyurl.com/3kou3w
- 32 The mayor's supplementary planning guidance refers to a benchmark standard of a minimum of 10 square metres of dedicated play space per child for all new residential developments
- 33 The current BREEAM assessment method does not require a target consumption to be achieved only to be set
- 34 The Office of Government Commerce's common minimum standards are available online. Go to www.tinyurl.com/3kou3w
- 35 see 34
- 36 Client design advisors (CDAs) are sector experts, often architects, who advise the local authority and building stakeholders on how to achieve the best design for their project. They can be found via the RIBA CDA register. Design Champions (DCs) will support design from within the local authority and will be someone at a high level who is able to take design quality decisions and provide a clear lead. Full descriptions can be obtained from the *Creating excellent buildings* design guide, available at www.cabe.org.uk/publications

- 37 Creating excellent buildings can be downloaded from www.cabe.org.uk/publications
- 38 RIBA offers an advisory service for clients seeking design teams
- 39 This may not be relevant to local authorities where there is an existing architecture department
- 40 Grants of up to £1 million per site are available for local authorities, housing associations, primary care trusts and charitable organisations for public buildings such as schools and hospitals. Available from the BERR, the grants are for micro-generation such as photovoltaics, solar hot water, ground-source heat pumps, wind turbines, wood-fuelled boiler systems and automated wood pellet stoves. For more details, see www.lowcarbonbuildingsPhase2.org.uk
- 41 EU performance certificates will only be needed for public buildings over 1,000 square metres; often children's centres are smaller than this
- 42 Some local authorities such as Leicester are implementing their own monitoring of public buildings and this has proved beneficial in understanding and reducing consumption and expenditure
- 43 Grants of up to £1 million per site are available for local authorities, housing associations, primary care trusts and charitable organisations for public buildings such as schools and hospitals. Available from the BERR, the grants are for micro-generation such as photovoltaics, solar hot water, ground-source heat pumps, wind turbines, wood-fuelled boiler systems and automated wood pellet stoves. For more details, see www.lowcarbonbuildingsPhase2.org.uk

Appendices

Appendix A

Participating centres and enablers

Children's centres taking part

Abbey Children's Centre

ABC Children's Centre

Alderwood Primary School

Ann Tayler Children's Centre

Asterdale Children's Centre

Bankwood Community Primary School

Bedworth Heath Children's Centre

Bideford Children's Centre

Bilborough Children's Centre

Brickhouse Children's Centre Early Years Unit

Brinnington Children's Centre

Brixham Children's Centre

Burley Children's Centre

Burngreave Children's Centre

Carousel Children's Centre

Chapeltown Children's Centre

Chelmsley Wood and Fordbridge Children's Centre

Church Street Children's Centre

Collingwood Children's Centre

Colne Children's Centre

Easington Children's Centre

East Riding Children's Centre Effra Early Years Centre Farmilo Children's Centre

Fawood Children's Centre

Fiddlers Lane Children's Centre

Filey Children's Centre

First Place Nursery

Flutterbies Children's Centre

Glascote Children's Centre

Granville Plus Children's Centre

Hancock Street Children's Centre

Harmony Children's Centre

Harmood Children's Centre

Hollingdean Children's Centre

Holmewood Nursery and Treehouse Children's Centre

Horsley Hill Children's Centre

John Perry Children's Centre

Jubilee Children's Centre

Kingston Children's Centre

Kintore Way Children's Centre

Lavender Children's Centre

Linden Children's Centre

Livesey Children's and All Age Centre

Low Hall Children's Centre

Middleton Children's Centre

Minik Kardes Day Nursery

Moat Farm Children's Centre

Mulberry Park Children's Centre

New Silksworth Children's Centre

Newbiggin Hall Children's Centre Newbold Riverside Children's Centre

Newbold Children's Centre

Newquay Children's Centre

Normand Croft Children's Centre

North Cambridge Children's Centre

North Dorset Children's Centre

North Ormesby Children's Centre

North Woolwich Children's Centre

Northlands Park Children's Centre Ocean's Children's Centre

Paradise Park Children's Centre

Pembury House Children's Centre

Pen Green Centre for Children and Families

Pomfret Children's Centre

Ravensthorpe Children's Centre

Reydon and Southwold Children's Centre

Riverside Children's Centre

Rowley Hall Children's Centre

Rowans Children's Centre

Sandy Lane Children's Centre

Seashells, Sheerness Children's and Family Centre

Sharps Copse Children and Family Centre

South Acton Children's Centre

South Bermondsey Children's Centre

Southcourt Children's Centre

St Anne's Park Children's Centre

St. Clements Children's Centre

St Martin's Gardens Children's Centre

St Stephens Children's Centre

Staffordshire Moorlands Children's Centre

Sure Start Darlaston Children's Centre

Tamar Folk Children's Centre

The All Aboard Centre

The Ark Children's Centre

The Brambles Children's Centre, Kingstanding

The Brambles Nursery and Children's Centre, Portsmouth

The Fields Early Years Centre

The Lanterns Children's Centre

Thorplands Children's Centre

Tolladine Children's Centre

Tower Hamlets Children's Centre (The Ark Dover)

Trust Taplins Childcare Centre

Tudhoe Children's Centre

Tudor Way Children's Centre

Westminster and Rossmore Children's Centre

West End Children's Centre

West Street Children's Centre

West Thurrock Children's Centre

Willow Children's Centre, Highbury

Woodroyd Children's Centre

CABE enablers taking part

Emma Adams

Cany Ash

Simon Beames

Andy Beard

Juliet Bidgood

Alison Davies Mark Dudek

Joanna Elev

Colin Farmer

Homa Farjadi

Chris Gaylord

Alastair Gourlay

Andy Greig

Anne Griffiths

Bob Haves Andrew Houlton

Justine Leach

Carol Lelliot

John Mitchell

Valerie Owen

Julian Robinson Gareth Simmons

Edward Walker

Daniel Wong

Appendix B

Methodology

The study aimed to review 100 centres an 8 per cent sample of the finished Sure Start centres and selected from all regions of England to provide examples of provision in the more deprived areas. The selection was made by the DCSF to meet these criteria and also to represent a spread of examples of different project types, including refurbishment, extension, complete new build and new modular construction.

A method was developed to:

- ask users and enablers to rate the buildings with respect to overall quality, fitness for purpose, good and bad points
- collect data on typology, cost per square metre, regions, procurement route and relate these to the rating
- use interviews, photographs and drawings to understand the results in relation to process and design
- identify and describe examples of good practice for dissemination.

For this scale of survey, a simple, quick, replicable approach was needed. In fact, data for 101 centres have been used for the findings. A short questionnaire was created for users and another for the enablers who would review the projects. These questionnaires (see appendix C for examples) were pre-piloted and amended and re-tested in a further small pilot. A group of 22 enablers was then trained to understand the goals of the project, use the questionnaire, obtain user views and gather and record the required information (all the enablers carrying out the evaluations are professionally qualified in a relevant field such as architecture, surveying or project management). This information covers facts about each building project, photographs of the finished project and comments from users interviewed on the day of the enabler's visit.

The review fell into a number of tasks. Each of the selected centres was visited by a CABE enabler – a professional working in the construction sector with experience of building design and its evaluation. Buildings were selected randomly from the DCSF database with a focus on those provided in the most deprived areas of the country, spread across the nine regions in England and representing different building project types. Visits were agreed with the relevant local authorities and arranged between the centre

manager and the assigned enabler. The design quality and suitability of the buildings for use as Sure Start premises were assessed and recorded through:

- a questionnaire filled in by an experienced professional covering:
- overall quality, including an assessment of any sustainable features by the enabler and satisfaction with the service by users
- access issues
- playrooms indoors
- outdoor play space
- adult spaces for staff and parents
- furniture and facilities

The questionnaire also provided a structured form on which to record data about the centre and those involved in its construction as follows:

- a questionnaire for users covering the same areas with slightly fewer questions. It also captured information about the users for analysis purposes – a target of about 20 users for each centre was to be sought
- notes from interviews with users by the enablers where these could be carried out
- a report from the enabler divided into the same sections to set the context and explain the judgements made where necessary
- photographs to help others understand the building and the judgements made
- drawings from the designers and information about construction type, size and cost, and the programme of activities and numbers of children and/or adults using the centre.

The findings are both quantitative and qualitative. A review of 101 buildings serving a similar function is unusual and this made it possible to draw some general conclusions on a quantitative basis. The post-occupancy evaluation process has provided a wealth of information about the children's centre building type and about examples of well-designed features for any building type, as well as mistakes that are regularly made and problems encountered with the process.

Enablers were also asked to provide a written report drawing out any important issues relating to design

and its effect on the users. A target of about 20 questionnaires filled in by users – staff and parents – was suggested and enablers were asked to initiate the process of distribution and collection with the centres. More than 2,080 users responded to questionnaires about their buildings, an average of 21 per building, although there were a few for whom there were few, or no, responses.

The score range on the questionnaires is from 5 ('excellent') to 1 ('unacceptable'), with 3 being 'not good or bad'. A general score for the centre overall was asked for and then groups of questions covered access, playrooms, outdoor spaces, adult rooms and furniture and facilities. The users were asked about their satisfaction with the service in order to help them distinguish this issue from the following questions about the building. The enablers, but not the users, were asked about sustainability (albeit in the knowledge that only opinion would be available), based on what could easily be seen and on statements from users or designers, and several further general questions about the building overall.

Once 20 centres had been reviewed, a moderation session was held with all enablers to ensure that the way in which they were judging the centres they had reviewed was comparable. The occasion was also used to check that the information asked for was generally being made available.

After the results for the first 20 centres were analysed and given average ratings from the enablers that were 'not good or bad', it was decided to select a group of appropriate centres that CABE's enabling team, working with Sure Start projects, could recommend as having been designed by architects the team considered experienced with this building type. They were included as part of the next 80 centres to see how they scored in comparison with a randomly selected group.

Restrictions encountered

The exclusions discussed below have arisen largely as a consequence of the decision that a simple, rapid review of 100 centres would be more helpful than indepth studies of only a few. There is such variation in the size, type of services offered and building circumstances that it was decided that a wide range of randomly chosen centres could provide findings that would be more likely to be accepted as relevant than a small number of in-depth studies. For a team

working on a future project, a few centres singled out for in-depth review would be more likely to be viewed as atypical or at least significantly different from the project in question and therefore less relevant. Nonetheless, some individual case study material is part of this project to help spread good ideas.

The post-occupancy evaluation considered interior and exterior spaces and elements only. No attempt was made to assess the service provision for quality, or relevance to the local population, nor to examine the economic viability of using the building for the service into the future. User comments shed some light on these aspects and where relevant they are considered when making recommendations. Enablers did not attempt to assess construction methods and long-term durability as this would have required a much more in-depth approach that would have been inappropriate to the 100-building study. Similarly, the sustainability rating is not based on a detailed data collection exercise but on the enablers' judgement arising from viewing the centre and discussions with users and designers.

Predictably, consistent collection of basic facts about each project was not as straightforward as gathering opinions through questionnaires and brief interviews and recording the enabler ratings. Data on each of the centres selected by the DCSF was provided from the DCSF database. The data was not always complete nor fully consistent with data provided by designers or ascertained on site. The definition and data for types, for instance, have been taken from the SureStart on database and these are not broken down into types such as whether the modular centre is new build or an extension. Nor does it distinguish between volumetric, pre-fabricated or panelised modular buildings. Because each local authority enters data autonomously, there have been differences with what has been seen by the enablers. Design teams and local authorities varied in how able or willing they were to provide the appropriate information for the enablers after the project completion. This means that for a proportion of the centres, data is missing or less complete.

Cost information was particularly hard to collect consistently. The costs of each project originally supplied from the SureStart_on database were found to be only approximately similar to those reported to the enablers by designers or local authorities and in about 30 per cent of cases varied considerably. The

cost data was entered by the local authorities directly and showed variations in consistency. Different local authorities may list only a contract sum, or the Sure Start-funded portion of a total project cost. This may not represent all the funding sources allocated for the centres, or cover all the same areas of spending: fees, furniture, play equipment, signage and so on. Despite efforts to verify the data, information about how much additional funding was obtained, or about other reasons for variations, such as how much of the overall project and its fees are included in the costs provided, have not been possible to verify accurately. This means that conclusions based on cost information must be treated with caution, which makes it hard to provide robust information about value for money. This is made more difficult by the fact that area figures are not available for about a third of the cases, so cost per square metre is not known. For this reason, we have only provided limited information related to cost.

Appendix C Questionnaires

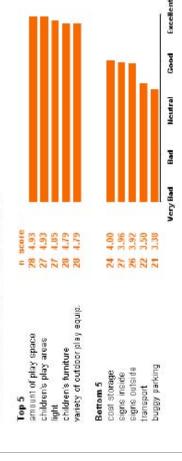
PEN GREEN PROJECT NAME							
How do you rate this building/play space and its facilities?							
Please tick one box on each line			ã				je je
the italics provide some prompts but are not exhaustive			not good or b		unacceptable	don't know	not applicable
Please use photographs where possible to illustrate suggested ratings	excellent		0		9	ş	ijd.
We are NOT RATING MANAGEMENT - Please use comments	e e	P	8	-	8	₹	e d
to describe how building and management interact or doesn't	exc exc	Doog	ğ	peq	Š	ě	Jo.
Overall	-33-54			1111111		3170	
Inspiring for children-stimulate imagination, tickle sense of fun, teach ideas							
size suitable for the activities - spaces seem large enough, height OK		-	15				
OVERALL - generally	Ш						
logic of the overall layout - age separation, adjacencies, circulation		-47		Ш			2 3
Image, Impact - external, Internal				Н	-		
appropriate in local context - positive contribution, suitable scale, style	_		\vdash	Н	-	_	
adaptability if needs change - sensible zones, subdivisions, structure				\perp			
Sustainability	1 1	1		7 7	77 77		
any special attention to sustainability - please comment	-	Н		Н		-	
ease/economy of maintenance - robust, replaceable finishes, lightbulbs Access				1			
accessibility - convenient for all users	T		TT	TT	TT	1	
transport - convenience of public transport and/or parking	-		1	H	\vdash		9 0
signs outside - clarity, encouragment to use				\square	\Box		
as you arrive at the front entrance - welcoming, convenient	_			П	\Box	F .	
inside the front door atreception - enough space, welcoming, ease of use	_			П			
coat storage - for children and adults							
buggy parking - amount, loction, ease of use, security							
signs/ 'legibility' inside - ease of understanding the building			45				9 1
Play rooms							
play space- allows full range of activities incl eg cooking , water play	_	Ш		Ш	\Box		
bables space - allows full range of activities		\vdash	17	Н			
environmental comfort - warmth/ventialtion/ warm floor to sit on	-		-	H	-		
atmosphere / feeling - welcome, secure, friendly, helpful	_			Н	\vdash	_	
light - good natural light, variable artifical noise - acoustic comfort, ability for staff and children to concentrate	_	1000		Н	\mathbf{H}		
colour and decoration - fun, robust, variety,	H			H	H	8	-
views - outlook, views of outdoor play space. Accesible to small children	H	- 85	\vdash	Н	\vdash		3
safety features - locks, pinched fingers, level changes, slips/trips				H	\Box		
Outdoor play space					-	10000	8888
amount of play space - room to run, jump, play group games	П	-77		П		T	
imaginative space - exploration, water, sand, climbing, all ages	70						0 0
access to nature - plants, water creatures, animals, sun&shade							
shelter from wind and rain - games, play in bad weather				Ш			
security - from outsiders, dangerous play	_	- 65	\perp	\vdash	1		
variety of outdoor play equipment - size, skill to use, individual/joint							
Adult rooms or spaces - staff and parents	T		1 1		T	00000	
good community facilities- adults waiting, watching, training rooms good staff sapces - offices, staff rest rooms, eating etc	_			H	+		
convenience of space - easy to work, flexible for different uses	_			H	+		3 8
windows and light - good natural and artificial, task focussed	_		H	H	\vdash		
views - able to sense the weather, see best aspects of environment	_			H		-	
equipment to support activities - range, amount for staff and parents	_	-8		\Box			1
Furniture and facilities	100 100			Color Color		100000	8888
children's furniture - integrated with building design/concept							
children's play equipment - suitabled, cleanable, robust,							1
infant nursery equipment- suitable, cleanable, robust,							
storage - plenty, convenient, size, suitability, available for all activities	_						
children's WCs - quantity, location, space to help							
adult WCs - quantity, convenient to use, disabled	-			0			
suitability for special needs - disability, autism, language	_			Н	H		
refreshments/food - NOT taste - eating ambiance for parents and children	_			H	\vdash		
cleanliness - ease of cleaning, safe convenient storage for equipment	_			H	H	-	-
kitchen(s) - preparation for babies, other,				\square	\Box		

Appendix D

Feedback

Lanterns Children's Centre

Users: Top 5 and bottom 5 of ranked facilities



Some User's views

Best is the fantastic outdoor play space and light airy atmosphere of the classrooms'

The garden is lovely there is so much to find and do. In addition to the playground there is a secure area with a pond and a nature trail where we can take the children. We are outside most of the year'

'Outside play area is in strong sun with little natural shade, maybe more trees (fast growing) could be planted'

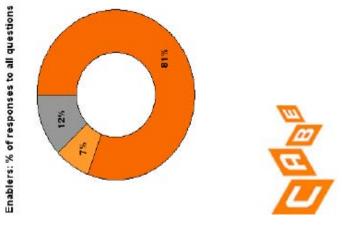
Enabler's report summary

real sense that the designers understand how energetic young children contemporary appearance and fits well in its context. The roof lanterns children's tables. The playrooms have excellent access to outdoor play morning before the classrooms open. The vaulted playrooms are softly veranda. There are plenty of opportunities to learn through play and a the playground. It is carefully detailed and has good quality doors and windows. The reception is light and airy and as well as controlling the can be. Adult spaces are also attractive and are well located with the create a distinct identity to each of the playrooms which spill out onto and meeting. It is where parents congregate with their children in the different activities. The wet area is lined with shelves and has access main routes into the building, provides a variety of spaces for waiting wooden fence and gate that allows children of different ages to be in and evenly lit, through the lantern and clerestory windows. The wide playground. These lights also ventilate the rooms. The rooms divide this age group and is separated from the main garden area by a low space. The under two outdoor play space is designed to be safe for informally into four play areas, with each corner being dedicated to to a store cupboard. The window sill is just above the height of the contact with one another. All the rooms have access to a covered veranda screens direct light to the large doors that open onto the A well designed centre with a clear approach: the building has a staff room deliberately in the quietest part of the building.

4 m m a a

Good Neutral Bad Very Bad

Key Excellent These views represent those of the individual enablers and users and not those of CABE as an organisation

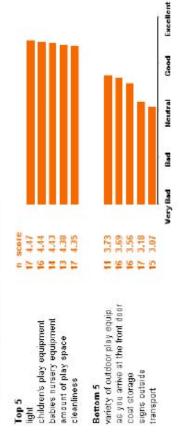


13 43% 15 51% 1 9% 1 9%

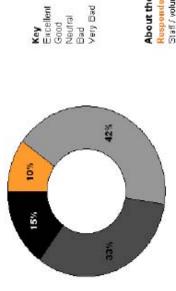
About the users
Respondents
Staff volunteers
Parents / carers
Other

Pomfret Children's Centre

Users: Top 5 and bottom 5 of ranked facilities



Enablers: % of responses to all questions



E04700



Some User's views

'I like the "indoor-outdoor" play room'

Best is the amount of space and toys in a safe clean centre'

[There are issues with] the quality of the building - the shutters keep breaking, the heating is not reliable, ...the windows are unsuitable for the age group, the toilets are not suitable, there is no lighting outdoors during winter, no air conditioning'

Enabler's report summary

metre above ground level to enable the floor levels of new and existing play areas which is a great loss. The refurbishment replaced some, but not all, windows and doors, and even in the new area the specification children's work has been used to decorate the play areas and brighten garage - and the reception area which is only served by borrowed light ntensive use. The main outdoor play space is large and flat. A second the atmosphere. Overall, it feels reasonably airy except for sections of the 3-5 area and the covered play area - which feels more like a large and is quite stuffy - top lights would have been helpful here. The café and minor community spaces, and a new modular extension housing purpose but are not stimulating. The raised solution, disconnects the This project encompasses a basic refurbishment of a modular former and training room furniture is pleasant and functional. The children's furniture is suitable but not imaginatively integrated with the building. emporary school building housing the Children's Centre mixed use building and the children's spaces from the ground and the external the 0-2 and 3-5 areas. The new extension has been raised about a making them narrow. Kitchens were rather small and not suited to seems relatively basic. The playrooms are large, allowing a wide Storage is limited and many corridors were lined with cupboards to run through. Overall, the internal spaces are suitable for their range of activities. Colour was not used within the building but space outside the mixed use room is temporarily out of use. These views represent those of the individual enablers and users and not those of CABE as an organisation

Appendix E

Project details for case studies

The Lanterns

Location: the suburbs of Winchester, Hampshire,

residential, non-school site

Building type: new build

Commissioning client: Hampshire County Council

Project team: lead architect: Hampshire County Council Architects; interior design: Hampshire County Council Architects; landscape architect: Hampshire County Council Architects; structural engineer: Gifford and Partners; quantity surveyor: James Nisbet and Partners; acoustic consultant: Arup Acoustics; main contractor: Carillion Regional

Total construction cost:

total £2,429,000 including: fees £381,800, externals £380,000, prelims and overheads £464,000

Contract value: £2.329.953

Procurement type: Negotiated contract and

partnering

Construction period: start: 2001; inception: 2002; planning permission: March 2004; construction: July 2004 to Sept 2005; building opening: October 2005

No. of child places: 55

No. of staff: 33 plus additional visitors

Sources of funding: HCC, DfES and local early years special educational needs support group

Gross internal floor area: 1,002 square metres

Net internal floor area: 852 square metres

Net usable internal floor area: 698 square metres

Cost per square metre (GIA): £2,424

Key stakeholders: Children's Services Department, Hampshire County Council; Medecroft Opportunity Centre; head of centre, Olivia Peak; chair of governors, Mollie White; staff and therapists (all of whom transferred to The Lanterns); and the staff of the St Bede Primary School Nursery (who merged with the new centre)

Northlands Park

Location: Felmore County School, residential area

of Basildon, Essex

Building type: modular new build on school grounds

Commissioning client and key stakeholders involved: Basildon District Council; Essex County Council; centre manager, Maureen Longley

Sources of funding: lottery for neighbourhood nursery initiatives, education standards fund from

LA, landfill tax, local businesses

Project team: contractor: Portakabin; project manager, Richard Webb, Gyronita Consulting

Gross internal floor area (GIA): 905 square metres

Net internal floor area (NIA): 752 square metres

Cost per square metre(GIA): £1,117

Building type: modular, freestanding

Total construction cost: £1,011,189; building

contract: £737,801

Procurement type: design and build fixed-price

contract

Construction period: six months

No. of child places: 50 No. of staff: Unknown

Use patterns of the building: crèche; drop-in; respite care; after-school club; baby massage; health clinic; music, speech and language; ante-natal classes; breastfeeding counselling; bumps and babies; parent training; cookery and belly-dancing classes. The Childminder Network and Jobcentre Plus use the facilities. Rooms are available for community hire. The centre has an all-day community café

Pen Green: project facts

Location: Rockingham Road, residential area near Corby, Northamptonshire; residential, non-school site

Building type: refurbishment and two extensions including external space

Commissioning client: Northamptonshire County Council Community Services and CYP Services for Children; Pen Green Centre Head

Funding: Sure Start trailblazer capital

Project team: architect: Greenhill Jenner Architects,

The Beach; John Bovinck, The Nest

Gross internal floor area: unknown
Total construction cost: £1,260,000

Construction period: one year (14 months process

lead-up)

No. of child places: 80 full-time places, 12 places

for babies

No. of staff: 73 (some part time and providing services)

Use patterns of the building: sessional crèche to support activities at the centre; after-school club; learning support groups; and antenatal and post-natal consultations and family support

Project history

1983 a one-stop neighbourhood nursery was opened in a redundant 1930s primary school in response to the huge social and economic impact of the closure of the steel works in Corby

1997 designated as an early excellence centre, a covered water play area was built onto the refurbished school buildings

1997-2002 Sure Start trailblazer project with Greenhill Jenner Architects designing new community facilities around a courtyard beach forming a new extension

2004 a new conference and training centre designed by Greenhill Jenner Architects was completed as part of the role of the centre as a national early excellence centre

2005 using neighbourhood nurseries initiative funding, architect John Bovink developed a baby and toddler 'nest' in a part-new, part refurbished building attached to the existing nursery

2005 the nursery garden was completely redesigned 2007 a new play bridge was installed linking this garden with a second nursery on the site (previously privately run, but now run by the centre)

Westminster and Rossmore: project facts

Location: attached to primary school in a residential area, Ellesmere Port, Cheshire

Building type: extension and refurbishment

Commissioning: Cheshire Sure Start

Funding: local programme capital £184,443; devolved school contribution £20,000; Sure Start grant £553,479

Project team: contractor: Conlon Construction; architect: Tweed Nuttall Warburton; structural engineer: Hughes and Crawford Consulting Engineers; mechanical and electrical engineer: Engineering Design Services; quantity surveyor: Thornton-Firkin Partners; geotechnical engineer: Geotechnical

Gross internal floor area: 514 square metres

Total construction cost: £ 768,860 (including

fees £94,410 and building £631,300)

Net usable area: 468 square metres

Cost per square metres (GIA): £1,496

Procurement type: partnering

Construction period: six months

No. of child places: 32 full time, 32 babies

No. of staff: 18 (with additional staff for adult services)

Use patterns of the building: parent advice mornings; health clinic; midwife and health visitor; informal stay and play; baby groups; baby massage; parenting skills; Jobcentre plus drop-ins; money-goround financial advice; adult skills classes: literacy and numeracy; supervised visits; anger management

Appendix F

Sources of guidance and ideas

Sure Start

- www.surestart.gov.uk
- www.dcsf.gov.uk
- National Sure Start Evaluation report www.tinyurl.com/5ovtd2

Design of children's centres

Managing the brief for better design, Alastair
 Blythe and John Worthington, Spon Press 2001

Post-occupancy evaluation

- A guide to feedback and post-occupancy evaluation, William Bordass, Adrian Leahman and Joanna Eley, Usable Buildings Trust, 2006
- 'Making feedback and post-occupancy evaluation routine 3: case studies of the use of techniques in the feedback portfolio', Building Research and Information, 2005, vol 33 no. 4, 361 75, William Bordass and Adrian Leahman
- 'Making feedback and post-occupancy evaluation routine 2: soft landings – involving design and building teams in improving performance', Building Research and Information, 2005, vol 33 no. 4, 353 60, Mark Way and William Bordass (summary article in Building at www.tinyurl.com/6pshko)

Downloads of documents above are available from the website www.usablebuildings.co.uk

Consultation and participation

- Community architecture, Charles Knevitt and Nick Wates, Penguin 1987
- Building democracy: community architecture in the inner cities, Graham Towers, Routledge, 1995
 ISBN: 978-1-85728-089-0 (paperback) 978-1-85728-088-3 (hardback) 978-0-203-21441-1 (electronic)
- Architecture and participation, Peter Blundell Jones, Jeremy Till, Doina Petrescu, Routledge, 2005
- The community planning handbook: how people can shape their cities, town, and villages in any part of the world, Nick Wates Earthscan Publications Ltd, 2000

 Spaces to play: more listening to young children using the Mosaic approach, Alison Clark, National Children's Bureau, 2005 ISBN: 1904787436

Low-energy design and public buildings

- Grant for micro-generation for public buildings www.lowcarbonbuildingsphase2.org.uk
- Sustainable Development Organisation Every child's future matters report 2007 www.sd-commission.org.uk
- Post-occupancy evaluation energy assessments of schools www.usablebuildings.co.uk
- Public building energy assessment methods www.breeam.org
- Sustainable Development Commission www.sd-commission.org.uk
- Leicester monitoring of public buildings at www.energie-cites.eu/db/leicester_566_en.pdf
- Oxford using GIS-based modelling (DECoRuM) for energy consumption of individual buildings at www.tinyurl.com/6dgwqr

Whole-life costing

- Whole Life Cost Forum at www.wlcf.org.uk
- Whole-life costing: a client's guide, BRE report funded by DETR, Clients Construction Forum, 1999
- Whole-life costing and cost management,
 Office of Government Commerce, 2007
 www.tinyurl.com/586cw7

Office of Government Commerce common minimum standards

- www.ogc.gov.uk
- Guidelines for government departments www.tinyurl.com/3kou3w
- Guidelines for local authorities www.tinyurl.com/667cre

General guidance

- Design Quality Indicator (DQI) information at www.dqi.org.uk
- CABE at www.cabe.org.uk

CABE publications

All CABE publications available at www.cabe.org.uk/publications

- Building for Sure Start client and design guide (2004) uses a number of specific examples to explain the essential qualities of such buildings.
- Every building matters (2008) illustrates specific characteristics and how they may be successfully incorporated at www.tinyurl.com/62lky6
- Further case studies and the publications listed above can be found on the CABE website at www.tinyurl.com/5ds6y3
- Creating excellent buildings: a guide for clients (2003)
- Early years case studies at www.cabe.org.uk/casestudies

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The government is funding 3,500 new Sure Start children's centres by 2010 in support of its ambitious plans to give pre-school children the best possible start. This post-occupancy evaluation by CABE for the Department of Children, Schools and Families presents the views of parents, staff and design professionals on the new facilities. It will be of interest to architects, centre heads, local authorities and the government and includes lessons applicable to future capital building programmes as well as the 1,000 centres still being built.

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Commission for Architecture and the Built Environment

The government's advisor on architecture, urban design and public space

ISBN: 978-1-84633-021-6

