



# Space learning for learning

*A new handbook for creating inspirational learning spaces*



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Sharing the best in Gardening



**This publication is for all those who plan, design, fund, manage, resource, programme and develop learning spaces within museums, galleries, and built and natural heritage sites.**

You can learn a lot about an organisation from its learning space. For a start, does it have one? Is it in the basement hidden from view, or proudly visible and prominent on the ground floor or above? Is it large or small – can it accommodate a class of 30 pupils and their teachers or will it only take a small group? Is it fit-for-purpose? Does it serve departments other than learning? Who programmes it, and how is it resourced and maintained?

Answering these questions can reveal much about the values – and leadership – of an organisation, about whether it places learning at the heart of its mission, and about how it positions itself within its community.

There are many factors that come into play when planning learning spaces. One is size: small organisations may have space limitations to work with. Another is age: if a building is listed then it may be impossible to create the ideal space, whereas new-build spaces can be planned more flexibly to meet the needs of their audiences. However, there are certain principles which can apply whatever the size, age, and constraints of a particular building, and whatever your available budget for developing or improving your space.

*Space for Learning* was originally published in 2004 by a consortium including the Heritage Lottery Fund, the Clore Duffield Foundation, Arts Council England, the Department for Education & Skills, the Department of Culture, Media & Sport and others. Some of the original partners have come together with other agencies to produce this new and updated version. This time around we are providing on-line case studies and additional material so that cultural organisations can continue to share best practice and learn from each other and their users. We have also been able to crowd-source some excellent new content from colleagues across the UK who have developed learning spaces in the intervening decade.

There is no single approach, but – as in all things – much can be learnt from those who have trodden the same path before you. There are vital questions to ask along the way. And there are considerations which you ignore at your peril if you want to create the best possible space for your visitors and users. It is in everyone's interests for all our learning spaces to be the best they can be in any given context. No matter how large or small, new or old, your site, or how limited your resources, there is no reason for you to aspire for your learning space to be anything other than exactly what your users, your colleagues, and your organisation need.

**Signed by the chairs of all the partner organisations**

Dame Vivien Duffield,  
Chairman, Clore Duffield  
Foundation

Sir Peter Luff, Chair,  
Heritage Lottery Fund

Sir Peter Bazalgette,  
Chair, Arts Council  
England

Michael Smith,  
Chairman, The Foyle  
Foundation

Dame Theresa Sackler,  
The Sackler Trust

Guy Weston, Chairman,  
Garfield Weston  
Foundation

Sir Nicholas Bacon Bt  
OBE, Chairman,  
Royal Horticultural  
Society

Lesley Butterworth,  
Interim Chair, engage

Peter Carne OBE, Chair,  
Group for Education  
in Museums

Bob Collins, Chairman,  
Arts Council Northern  
Ireland

Professor Geoffrey  
Crossick, Chair,  
Crafts Council

Jane Duncan, President,  
Royal Institute of British  
Architects

Greg Dyke, Chair,  
British Film Institute

Sir John Sorrell,  
Chairman, Creative  
Industries Federation

Foreword

**Right:** Schoolchildren investigate objects in the Clore Discovery Centre at National Museum Cardiff





**Dedicated spaces for learning in our museums, galleries and built and natural historic sites – separate from gallery or other provision – are essential. Having a dedicated, safe space where different types of learning can take place allows organisations to cater for the widest possible audiences, including visitors with additional needs.**

The environment in which we construct new knowledge has an impact on what and how we learn. Good spaces for learning enable our audiences to engage in a myriad of ways. There are many practical considerations to bear in mind and much research underpinning the guidance set out in this publication. For example, evidence tells us that having a well-ventilated learning space with natural daylight and good acoustics is not a luxury: it improves the attainment and experience of learners using the space.

We hope that the practical information in this publication will help you build/redevelop/enhance/improve/manage a successful space for learning within your organisation; and that the Checklist of Questions on page 52 will provide you with a handy reference document at the outset.

A wide variety of case studies, and detailed evidence on such things as how the acoustics, lighting and thermal comfort affect learning, are all available on the *Space for Learning* website:

[www.spaceforlearning.org.uk](http://www.spaceforlearning.org.uk)

# Introduction: why space for learning is important

Family workshop in the Clore  
Ceramics Studio at Camden  
Arts Centre, London





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# Planning your space

Event for Community  
Field Workers in the  
Gardens Pavilion at the  
Horniman Museum and  
Gardens, London



# 1

## Planning your space

**The first step in planning a new learning space – or refreshing an old one – is a consultation process. Start by identifying your beliefs, and those of your organisation, about how your audiences learn. Know your organisational values and review why you have/need a learning space. How do you enable learning to take place? What is the essential ethos of your service that you want to maintain or refine through your space? Who are the key people who can help you develop your thinking about its future?**

Through the consultation process you should aim to develop a list of audiences, types of activities for those audiences, and an indicative 'day in the life' of the space for different times of the year (e.g. term-time, weekends, holidays). It is also useful to develop a 'visit walk through' during which you and your colleagues think through every aspect of a visit, from entering the building to moving through the cloakroom, toilets and lunchroom and then leaving, in addition to the activities you want to do in your space. This information will allow you to develop your brief and establish an early budget. You can find a sample 'day in the life' document on our website.

**Consult your audiences – we learned a lot even though we do education all the time.**

*Anya Oliver, Project Development Manager, Devon Wildlife Trust*

### Internal stakeholders

Consult with the colleagues who plan and deliver your learning programme, and speak to other internal stakeholders. Engage too with colleagues beyond learning (e.g. curatorial, front-of-house, marketing) to build their understanding of how the space will be used. Find out what aspirations your stakeholders have for the future programme, and what they need and want from learning spaces. Who are the audiences your learning space needs to serve? Will they change in the future?

Once you have identified the current and future audiences for your space, and your own pedagogical approach for delivering learning to them, the next step is to understand what those audiences need and want from a space.

### Audiences

Consulting with audiences to understand their needs is essential, but remember to keep it focused on the desired outcomes, not on design details, which will come at a later point in the process. Asking audiences how they want to feel or the things they want to be able to do in the space will give you a useful set of guidelines.

Consider how you will reach all your audiences, and the ways in which they may feel most comfortable giving you feedback. Your audiences will also have priorities and ideas to contribute that you may not have thought of, so create time to hear what they think.

# Consultation



**Left:** Schools workshop, Clore Learning Centre, Tate Modern

**Right:** *Investigate* within the Natural History Museum's Clore Education Centre

Questions you might include are:

- What is their purpose in coming to your learning space?
- What specific intellectual needs does each audience have. Are some styles preferred, or more appropriate than others?
- What type of environment do they wish to learn in? Are there specific physical or intellectual needs you need to meet?

Useful resources for planning your consultations can be found at the following link:

[www.spaceforlearning.org.uk/consultation](http://www.spaceforlearning.org.uk/consultation)

### Consulting with children and young people

When consulting with children and young people, it is not simply a question of asking them what they want from a space – they won't necessarily know what is possible. There is also the issue of managing expectations: young people may make creative suggestions that cannot be implemented because of budget or staffing restrictions. And there is the temptation to listen only to the vocal and verbal young people who are used to being heard; they may not be representative, they may just say what they think you want them to say, or they may simply describe what they have seen elsewhere.

Consulting with young people requires specialist skills and experience. While many museums and other sites may feel they have internal expertise to run such consultations, others may want to use dedicated researchers. Many funders, such as the Heritage Lottery Fund, will consider supporting these costs as part of a capital project, and there are alternative sources of help and support – see our website for examples.

### Audiences with additional needs

There is a great deal of support and guidance available to help you plan inclusive and accessible spaces for disabled learners. Our website features links to detailed advice, such as information on Inclusive Design, which seeks to remove barriers to participation and is user-centred.

Involving audiences was an important part of the Coach House planning and development process and allowed us to design a space which meets users' needs. Our focused consultation lasted a year and elicited views from Gallery visitors, education service users, local residents, current and potential clients and other stakeholders inside and outside the Council.

Pippa Joiner, Arts & Heritage Development Co-ordinator,  
Orleans House Gallery, Richmond upon Thames



# 1

## Planning your space

# Inspiration visits to other sites

Children working standing up at tables in the Clore Learning Studio at the Leach Pottery, St Ives, Cornwall



**Many colleagues cite visiting other learning spaces and talking to peers about their experiences as the most valuable thing they did when planning new or refurbished spaces for learning.**

We strongly recommend that you visit other learning spaces.

You can use our case studies or favourite spaces listed on our website to identify good spaces to visit near you:

[www.spaceforlearning.org.uk/casestudies](http://www.spaceforlearning.org.uk/casestudies)

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It was important to go and see other education spaces – we were very grateful for the honesty of colleagues in other museums and organisations. This gave us great confidence when discussing our requirements with the design team.

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Mary Kinoulty, Head of Learning, The Mary Rose, Portsmouth



# 1

## Planning your space

# Future-proofing



**Whether your project is to rethink, refurbish or build a learning space, it is essential that you explore – from the very start – how you might incorporate the potential to adapt to changing circumstances or demand.**

Technology will, of course, be the aspect of a learning space that is most problematic when it comes to future-proofing. For more on this, see page 42.

As part of your consultation process you will identify the different groups and types of individual who will use the space – including staff. It may be that the site caters for specific ages because of the nature of its collections or archives: even so, try to build in some flexibility to enable the space to be accessible to, and compatible with, a wider range of user, in case the institution or education team extends the reach of its work.

Consider the following:

- Do the location and layout of the space suit the different ages and physical abilities of all users?
- Are the fittings, furniture, equipment and materials compatible with the range of users?
- Will all types of user be able to develop a familiarity with, and feel 'ownership' of, the space?

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Think about how much storage you may need and double it. Try and predict how much storage you will need in five years' time.

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Eleri Wyn Evans, Learning Manager,  
National Museum Cardiff

# 1

## Planning your space

**The most successful new or refurbished learning spaces – whatever the size – have come about from a close understanding between client and architect of what is needed. That means talking and listening, as well as designing.**

It is the individuals involved, and their ability to collaborate effectively, that determine the success of the client-architect relationship. This means understanding each other's approach and needs in terms of designing and fitting-out the space; and identifying and acknowledging gaps in expertise or knowledge of both client and architect.

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Reiterate loudly the need for wide bore drains and storage space. Make a point of hammering out lunch arrangements for visiting school groups. Know exactly how many tables and chairs you want, and how high you need them to be.

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Lucy-Ann Pickering, Education & Learning Manager,  
Royal Mint Museum, Pontyclun, Wales

# Working with architects



When an architect is on board, your task is to decide what is needed and to provide a 'starter brief' as a guide. The architect's task is to add value, and some magic, to that brief and to the eventual space. Your *joint* task is to come up with the final brief that will deliver what the client wants and the architect can design. In short, it is a two-way process.

**Make sure you are able to speak and feed in directly to the design and architect stage of development, rather than through an intermediary.**

**Sarah Cathcart, Head of Education & Learning, RHS Wisley, Surrey**

In some cases the architect can provide new insights into the location, shape and content of your learning space, but don't expect architects to know everything about your learning activities and their requirements; insist on additional expertise being brought in where necessary.

In developing their briefs, many sites have found it useful to take their architects with them on inspiration visits to other venues – even to different public buildings, such as theatres. These visits can also be effective in getting internal stakeholders on board and in generating excitement for a project.

Our case studies show that it is best to have one person act as the main link between staff and architects. Establish regular and straightforward ways for staff to consult together. How this is done depends on your organisation's culture and staffing structure, but bear in mind the following important points:

- Do not allow hierarchies to restrict the involvement of the learning team in the consultation and decision-making processes – whatever the size of the project. Our work with a wide range of organisations highlights that the head of learning should always be part of the senior management team, and be seen as a key player in planning any learning space project
- Ensure that everyone is involved in the consultation process in ways that are effective, transparent and trusting. Many organisations have used face-to-face presentations or design workshops to communicate with user groups
- Although visuals can be helpful, avoid unrealistic artists' impressions of learning spaces showing many more users than will actually be possible
- Ensure that the development process includes clear sign-off points and that a record is made of all decisions taken
- Set aside time for all involved to engage with brief-development, otherwise day jobs and routine tasks will get in the way
- Make certain that everyone understands what is being proposed. Explain technical terms and architectural drawings and jargon. Always say when you don't understand something, and encourage others to do the same



### Working with your architect

- Architects appreciate a strong client who knows what they want and is competent to write a good working brief
- The journey from concept to outcome happens best where someone within the institution is championing the plans for the learning space
- Find out which architect within the practice is in charge of the design for the learning space; it is often not the lead architect
- Allow plenty of time to consider the plans: if in doubt, seek advice
- Architects' plans tend not show the room dimensions in square metres; this information must be requested. Remember to request the square metre dimensions before and after fit-out
- Provision must be made from the outset for architects' revision drawings
- Research other learning spaces *with similar dimensions to yours* to see what is possible, keeping in mind that large institutions do not necessarily have better learning spaces. Smaller institutions sometimes offer more realistic and inventive models

**Gillian Wolfe CBE,  
Design for Learning consultant**

# 1

## Planning your space

**Previous page:** Exterior of the Clore Education Suite at the Great North Museum, Newcastle, with adjacent outdoor area

**Main:** The Clore Learning Centre at the Old Royal Naval College, Greenwich

**Inset top:** The Coach House Education Centre, Orleans House Gallery, at night

**Inset bottom:** Clore Studio, South London Gallery



# Working with architects



# 2

# Develop your brief

**Learning spaces are important and should be planned carefully and in detail, regardless of the size of project or budget.**

Be aspirational and have high expectations of how learning should be positioned, both physically and intellectually within your organisation. Funders are interested in projects which set the bar high.

We strongly recommend that you map out what a typical 'day in the life' of your learning space will consist of, including weekends and holidays, and create a 'visit walk through' considering all the activities of a group, including arrival, travelling through the site including cloakroom, lunchroom and toilets, and leaving. These two documents will help shape your brief and better inform your architect or other stakeholders about your needs.

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## Visit walk-through

**Think about who is going to use the space and try to think through a visit to work out exactly what will work and what you will need. Ask yourself as many questions as you can. For example:**

- If a group comes in, where will they put their coats and bags? Even if they are just bringing their lunch for later, it is surprising how many will bring large rucksacks which take up a lot of space
- If you are going to show original objects or documents, how will you manage when the room is filled with an entire class?
- Where will you keep materials for a workshop during a visit, making sure you can access them quickly and easily?
- What are the routes like in and out of the room to the different tables? Any bottlenecks?
- When children put their coats on to leave, it is difficult to get them not to bunch together in the coat area; do you have enough space there?
- If you have a whiteboard to write on, can everyone see it from where they will be sitting?
- Do you have enough storage?
- What is access to toilets like? Will you be able to accommodate toilet trips during a workshop?
- What about when children have to eat their snack (morning classes always seem to need a snack)? Will there be issues with food waste near objects/documents?
- And lastly, when planning for space capacity, don't forget about the adults that come with the children! A space can hold 33 children but will it hold the four, five or even six adults that accompany them? Do you have seats for the adults?

**Sarah Chapman, Learning & Outreach Officer, University of Aberdeen**

# 2

## Develop your brief

It is incredibly important to retain the key features of the building. The Foyle Art for All Learning Studio features restored ceramic tiles and the original fireplace, which helps maintain the ambience of Watts Gallery Artists' Village and creates a unique and inspiring space.

Perdita Hunt, Director, Watts Gallery, Surrey

# Ambience



**Bottom:** The Sackler Centre for Arts Education at Dulwich Picture Gallery

**Inset:** Figures on the doors leading into the Clore Learning Centre reference the history of the site at Hampton Court Palace, Surrey

**The space needs to be welcoming and enticing. The fixtures, fittings, lighting and ambience will speak volumes and give an immediate impression as to whether this is a nursery, a classroom, a creative studio, a learning lab, or a multi-purpose and spirit-lifting environment.**

- A bare room does not give an impression of a cared-for interactive space
- If on view to the public, what impression does the room give when not in use?
- How can the space appear lively and stimulating at all times?

Rather than adding permanent displays for an unchanging aesthetic, where possible it works best to let the creative activities be the focal point. Display areas are always desirable, but they are only attractive if displays are well-mounted and if someone has time to maintain them.

Where the room activity is seen by the general public it is a useful window into your organisation's work, and serves to advertise the programmes on offer to tempt the onlooker to join in or find out more.

Even in shut-away rooms, a glass door panel can add to the openness of what goes on, although this may not be possible in panel doors in historic properties.

When the space activity is not on view, a poster-stand outside the room with attractive graphics describing the activities on offer can be a simple and attractive way of advertising inclusive programmes.

Rooms do not have to remain immaculate, white, clean and devoid of personality. Every institution is different, with its own characteristics, and the space should reflect those differences and confidently express them.



# 2

## Develop your brief

# Location & dimensions

**The ideal learning space is not tucked away in a remote basement, but is at the heart of your site – and is allocated as much room as possible to enable a wide variety of activities.**

Learning spaces are best located close to an entrance, with easy access to toilets. Offices located next to or near your learning space will save you time when operating the rooms, and allow passive observation as required.

Rooms should have access to natural daylight; rarely are spaces below ground inspiring. They should be clearly visible, both to engage all visitors and to send a clear message about how learning is valued in an organisation.

Our learning space is a contained space that is clearly distinguishable from the rest of the Museum but offers easy access to the galleries.

Lisa Gale, Museum Education Project Manager,  
Worthing Museum & Art Gallery

Experience tells us that in the majority of institutions, space is at a premium and compromises have to be made. In new-build situations a learning suite/zone may be possible, where several generously sized rooms can have different functions.

We recommend an area of at least 98m<sup>2</sup> per learning space. When properly fitted out, a 98m<sup>2</sup> space will reduce down to 85m<sup>2</sup>. This is adequate but not generous.

An 85m<sup>2</sup> learning space will allow a class of 30 primary age children with three helpers to be involved in creative artwork or other style of learning on small-sized paper, sitting very closely but with little perambulatory space. The same dimensions are suitable for 15 adolescents, or adults working more expansively in a workshop.

These dimensions do not include coat and bag storage, but do include sufficient storage for a full range of creative activity.

In historic properties where the layout may not be changed or walls removed, there is often little choice about the size. This is where a clever design for fit-out is crucial.

In new-builds, a covered or uncovered 'learning terrace' is very often possible to increase the space potential by allowing for learning to spill outside in fine weather.

**Below:** Outside lunch space at the Gardens Pavilion, Horniman Museum and Gardens, London





If it is an outdoor space, think carefully about the position to ensure the area doesn't get too hot or too cold: which direction does the weather usually come from, where is the sun? Make it bigger than you think it needs to be!

Abi Crutcher, Education Officer,  
Montgomeryshire Wildlife Trust

**Left:** The Discovery Centre  
and outdoor space at RSPB  
Minsmere, Suffolk

**Below:** Schoolchildren admire  
the view from the Clore  
Learning Studio at Turner  
Contemporary, Margate



# 2

## Develop your brief

**Colleagues who have developed spaces tell us flexibility is the single most important attribute. The ideal learning space is a fully adaptable, flexible space, fit for multi-purpose, multi-age use.**

Multi-functionality is key for mixed-age participants. In the past, learning or education has meant for many, school rooms or classrooms. School visits may be the bread-and-butter education audience for many sites, but schoolchildren do not need classrooms, they have them already in school. Pupils respond to inspiring spaces.

Most institutions offer family programmes where the learning space is also used by very young children and their parents.

Learning spaces need to be attractive to adolescents, individual adults and community groups. Increasingly, they need to accommodate programmes that enhance the lives of a growing elderly population.

The learning space needs to be sophisticated enough to attract all ages, without an adult feeling that they have come to a child's classroom for their course, event demonstration or workshop.

Successful learning spaces do not replicate seminar rooms, ICT labs or an exhibition extension area. Similarly, learning spaces in pristine contemporary form resembling an unlive-in kitchen showroom are not conducive to creative learning. Multi-purpose learning spaces are not carpeted. Learning spaces are not lunchrooms or coat and bag cloakrooms.

A good learning space should work for all.

The Coach House is a flexible space, which was designed to be used for a range of different audiences and activities: from school workshops and heritage craft activities, to conferences and lectures. Through clever storage solutions and an understanding of our users, a learning space was created that has enabled us to engage and inspire people with heritage since 2004.

Pippa Joiner, Arts & Heritage Development Co-ordinator, Orleans House Gallery, Richmond upon Thames

# Flexibility

**Right:** Using the learning space for a shadow puppet show at the South London Gallery

**Top:** The Clore Learning Centre set up for an early years activity at the Old Royal Naval College, Greenwich

**Bottom:** The Coach House Education Centre at Orleans House Gallery (supported by the Heritage Lottery Fund) has resilient flooring and sliding screens over the storage and sinks area





# 2

## Develop your brief

**There is a danger that for many learning spaces, the storage may be inadequate or unfit for purpose. Keep in mind this equation:**

*The amount of stock that can be stored is directly related to the span of activity possible. More stock and equipment = a wider range of practical programmes.*

The greater the age range and type of participant served, the greater the variety of stock required.

A separate storeroom is an ideal solution. For making activities, re-ordering is less frequent, saving staff time and ensuring bulk-buy cost savings, and a greater variety of items can be kept at hand, including large quantities of paper; costumes; still-life objects; handling items; a variety of media; tools and essential equipment.

However most learning spaces do not have the luxury of a dedicated stockroom, and here the internal nature of room storage is key.

Art, crafts, sculpture, textiles, drama, photography, 3D workshops of all kinds will need clever storage to avoid open cupboard doors spilling out a chaos of materials. Floor-to-ceiling cupboards are rarely the answer: in high rooms, ladders will be needed to bring down stock, which can create health and safety hazards and inconvenience site staff. The least accessed shelves then become a storage space for unused clutter.

*You can never have enough storage; it would be good to have more but the space doesn't allow it.*

Lucy Jenner, Learning & Outreach Manager, Ditchling Museum of Art+Craft, East Sussex



**Top:** A wall of built-in storage in the Clore Creative Studio at the Foundling Museum, London

**Middle:** The Sackler Centre for Arts Education at Dulwich Picture Gallery has slim metal paper-storage drawer-units for all types of paper

**Bottom:** The built-in storage in Studio Two at the Hepworth Wakefield includes pull-out storage pods that are stocked for specific sessions. The pods can be reversed to show a blank white surface for formal meetings and events

# Storage



Bear in mind that high floor-to-ceiling doors can easily warp and then do not close properly. If they are very thick, the tall doors can be heavy to move (even if they are designed to slide rather than pull open). Make sure that internal shelves are sufficiently robust so that they can withstand the weight of stacked materials without collapsing. Clever storage can be hidden in-between wall ducting and in partition walls.

Consider too that floor-to-ceiling storage excludes the possibility of permanent surfaces – useful for any room, otherwise there is nowhere to display work or even put things down. This is especially relevant when it comes to storing and moving handling collections or museum objects.

Surfaces, usually over cupboards, need multiple electricity points adjacent for plugs for many types of equipment. If you choose to invest in digital equipment you will need to consider secure storage that has a built-in charging facility. Floor plugs cannot be the only supply of power, as flexes are a safety hazard and you will need to find ways of concealing/covering the cables; wall, desk and even ceiling-mounted hanging power sockets are all options.

Intelligent storage may include slim metal paper-storage drawer-units for the great variety of paper always needed. Wood plan chests can have a short life with heavy use, and the drawers are heavy to use.

No two rooms are of the same proportion or have the same requirements: storage needs to be tailored to individual spaces and programmes.

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Over-estimate the space you need – you can never have too much. For efficiency, make sure that equipment, craft materials, catering facilities – everything you might need to make the space work – can be stored out of sight but are easily accessible. You don't want to have to trek to the other end of the building to get cups and saucers, or move tables long distances.

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Kathryn White, Museums & Galleries Development Manager,  
Kirklees Museums & Galleries

# 2

## Develop your brief

**Good lighting is a basic requirement. In the majority of spaces this is daylight from windows or top-lit roof glass.**

Sometimes learning rooms have unavoidably low levels of light (as in basements, attic spaces or where windows are very small or too few or even lacking completely). If this is the case, the situation must be addressed with a lighting plan.

Allow as much light as possible into the space. Make sure lighting is flexible; dimmer switches, isolated lighting systems. Invest in good window blinds if the space is light.

Lucy Jenner, Learning & Outreach Manager, Ditchling Museum of Art+Craft, East Sussex

A lighting plan needs to replicate north light as far as is possible, and the lighting should be capable of change for different uses and at different times of the day.

For example, the room may need to be blacked out at the touch of a switch, or be used for a social/fundraising event, or a launch to celebrate exhibited education work. In each case a different ambience will be needed. This is mostly enabled by up- or down-lighters. In some sophisticated lighting systems the main lights can be adjusted to a range of different settings. Where learning spaces are used in the evenings, the lighting plan must provide sufficient good-quality lighting.

For more detail on lighting and a sample lighting plan, see our website:

[www.spaceforlearning.org.uk/lighting](http://www.spaceforlearning.org.uk/lighting)

**Below:** The learning space at the South London Gallery utilises a skylight and additional ceiling-mounted lights

**Right:** The Clore Learning Studios at The Hepworth Wakefield have been fitted with a variety of lighting options, including spot lights and LED lights, which allows staff to alter the ambience. The 10 silicone pendant lights in the Welcome Area are easily removed if required for different room set-ups, and add warmth to the space



# Lighting



# 2

## Develop your brief

**The ability to hear instructions and information is important in learning sessions, especially in unfamiliar environments, as it contributes to a sense of control and security. Research has also shown that it is particularly important for primary age children to be able to hear clearly.**

The Department for Education's guidance for schools sets the upper limit for ambient noise levels of between 35 and 45 decibels. Measures to prevent echoes are also desirable to ensure acoustic comfort in rooms. An acoustic plan might include an acoustic surface layer on walls or ceiling and even on the underneath of tables. In hard-surface rooms the acoustics can be a major problem unless pre-planning averts noise issues. Remember that the type of flooring used will affect noise levels.

For more detail on acoustics and a sample acoustic plan, see our website:

[www.spaceforlearning.org.uk/acoustics](http://www.spaceforlearning.org.uk/acoustics)

Timber has been added to window sills throughout the space, particularly around the glazed partition, to help minimise the reverberations of sounds and provide warmth and colour to the space.

Victoria Boome, Interim Head of Learning,  
The Hepworth Wakefield

# Acoustics

Pottery workshop in the  
Foyle Art for All Learning  
Studio at Watts Gallery  
Artists' Village





# 2

## Develop your brief

**Main:** Schoolchildren in the Growing Lab, which has a glass roof with ventilation and shading, at RHS Wisley, Surrey

**Inset:** The Coach House Education Centre at Orleans House Gallery has a wall of glass doors and a glass canopy to maximise solar gain, with wooden doors that can be used to manage the amount of shading on warm days

**The ability to control the temperature in a space is important to learning, as ventilation to ensure good air quality.**

Evidence suggests that high levels of CO<sub>2</sub> in classrooms are detrimental to children's attainment and increase the number of sick days taken by teachers. Plan for good ventilation, and ideally have windows you can open. If this is not possible, plan how you will circulate air.

In new-builds the design should enable sufficient cooling through good design, insulation and passive cooling systems that produce natural enhanced airflow. For renovations, it is a question of working with what is already in place; but in both cases every opportunity should be taken to find the most energy-efficient solution.

# Heating & ventilation



Think about how you will use the windows and ventilation. The Growing Lab is part of the large glasshouse and has a glass roof – a cooling system would have been worth installing in this room despite the additional cost.

Sarah Cathcart, Head of Education and Learning, RHS Wisley, Surrey

How you will maintain a comfortable temperature in your room/s is an important consideration. Thermal comfort is achieved at between 18 and 24 degrees Celsius.

Where possible, have your learning space(s) on a separate heating control from the rest of the site, so that when the rooms are in use with lots of warm bodies heating up the space, there is a way to regulate the temperature.

Consider what directions the windows face. If they are south-facing you need to bear in mind the impact of solar gain, how sunshine will heat up your rooms, and how you will shade your windows.



# 2

## Develop your brief

**Flexible learning spaces need durable, slip-resistant, easily cleaned flooring. Carpet is never suitable for creative wet activities.**

It is important that floor coverings are able to cope with heavy use and a range of activities, especially wet work. Mistakes are often made with the colour of the flooring, with venues choosing pale or light colours; these are impractical in terms of cleaning, and readily show stains.

The type of flooring used will affect noise levels. Stone, tiles and concrete are cold and noisy, and dropped items are more likely to shatter. A wood floor is warm and handsome but is still noisy and will need higher maintenance in an art-making space, with stripping and resurfacing every two years with a matt varnish – if the maintenance budget allows. Lino is quiet; it is a good-value, easily available, solution that comes in a variety of types and at variable cost; but bear in mind that it is unsuitable for underfloor heating.

**Below:** The floor in the learning space at Manchester City Art Gallery being used as a work space by families

**Right:** In the Discovery Centre at RSPB Minsmere, Suffolk, flooring communicates useful facts as well as being hard-wearing and waterproof



# Flooring

What's rustling through the reedbeds?

Wading through reedbeds  
Marsh wren  
Bearded tit



Common tern  
Common terns spend the winter off Africa's coasts and fly all the way back here in spring to nest.

"Open heart and mind!"  
Wildlab

Black-headed gull  
In spring you'll hear the squawking and squabbling of the nesting gulls long before you see them.

# 2

## Develop your brief

**Walls can be learning spaces too. You can use washable white-board walls (with the correct pens that won't stain!) or glass walls as a learning wall in sessions, with groups writing and posting ideas and work-in-progress on them.**

If you want to use walls to display work, remember to consider issues such as the location of shelves and radiators.

Where space is at a premium, consider substituting large wire drying racks with a retractable clothes line: you can hang wet work out to dry on clothes pegs for all to see and enjoy, again adding to the creative feel of the room.

It may be possible to have hooks on which to suspend creative mobiles. Shelves to show interesting objects where possible will always enhance a room. A very useful fitting is a good-sized flat wall screen and ceiling-mounted overhead projector, to show images for a particular session, or to leave on display showing evidence of creative activity as a backdrop for events.

Each surface has been treated with magnetic strips, white board and chalk board, to offer a range of different display options. Cupboards have 180-degree hinges so can be used for display whether open or closed.

Victoria Boome, Interim Head of Learning, The Hepworth Wakefield

**Top:** Making good use of the windows in the Clore Centre at Tate Britain

**Below:** Using the walls for drawing at the South London Gallery

**Right:** Work is displayed on walls using magnets in the Clore Learning Centre at the Old Royal Naval College, Greenwich

**Below:** At the Studio at Wellcome Collection, London, a glass display case in place of a wall allows visitors to see in, and for work to be displayed

# Wall space & display





# 2

## Develop your brief

**Right:** The sinks in the Coach House Education Centre at Orleans House Gallery are easily accessible for wet activities, and can be quickly hidden behind sliding screens when the room is needed for more formal events

# Plumbing



**A good sink area is possibly the most basic essential, but its importance is very often overlooked.**

Aside from its use for art activities, it can be vital for hand-washing, particularly if there are lunches being eaten prior to object-handling, etc.

Sometimes architects prefer sinks to be hidden away in a cupboard, prioritising aesthetics over utility. While this is generally not possible for most sites, it can sometimes work in historic houses where there is a requirement or preference for period authenticity: here it usually necessitates a very large cupboard or small adjacent room.

For the majority of organisations, the sink area must be easily accessible and not hidden away. Double-bore drainage is the only way to avoid blockages. Sinks need to be deep enough to fill for soaking stained items. A common problem is specifying a flat draining board for a seamless look, which results in water dripping down onto the floor; a raked drainer solves this.

**Below:** Sink with a lip to prevent water dripping down in the Sackler Centre for Arts Education at Dulwich Picture Gallery



# 2

## Develop your brief

**In any busy learning space, the furniture needs to be lightweight so that staff and volunteers can move it about easily.**

Such furniture is often the least expensive. Tables and chairs are usually moved around regularly; stackable, easily cleanable furniture is therefore most practical.

Chairs, not stools, are required for comfort and safety where mixed ages use the room, although bear in mind for inclusive design that a range of seating options from the same suite of furniture is best. Chairs for older adults are preferable, with both back and arms for support: these can also be lightweight and stackable. Tables may need to be of different heights. They can be covered with inexpensive, wipeable plastic cloths – not to keep them clean, but rather to avoid a classroom feel and advertise the colourful creative activities available.

If you have room, easels with splayed feet are heavy items that take up space, but can be lined up against each other along a wall where they can add to a creative ambience. These allow for drawing and painting workshops for adolescents and adults. Flat-packed table easels are an alternative, taking less room to store. There may be space to store a mobile trolley to move around from room to room.

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In our learning space all the tables are tilt-and-turn and have castors as well as multi-way locking devices, which means that we can set them up in any arrangement and also get rid of them easily if we need a large space to do drama/dance. We also have a whiteboard that runs the length of one of the walls, which is very useful for teaching and planning.

---

Sarah Chapman, Learning & Outreach Officer, University of Aberdeen

# Furniture

**Top left:** Lunchroom tables and benches in the Sackler Centre, Victoria & Albert Museum, London

**Top right:** Using easels in the Clore Studio at the Whitworth Gallery, Manchester

**Middle:** Low-cost, light and stackable tables and chairs at Oriol Wrecsam's Workshop 12, North Wales

**Bottom:** South London Gallery's learning space set up for a talk with stackable chairs



# 2

Develop your brief

# Technology & digital



**It is important to consider the role of technology and digital resources in your learning programme.**

Increasingly, learning environments are less about providing hardware, and more about ensuring sufficient bandwidth and access to power for mobile devices.

Many visitors already bring their own browser in the form of tablets or smart phones, and pupils will have increasing access to these. Some sites may wish to restrict the range of external websites that those connected can access. In the short term it may be necessary to provide some hardware – for example, tablets for use with schools – but this should not be the assumption.

The key will be providing Internet access and power. Learning rooms may need to provide sufficient Wi-Fi bandwidth for concurrent use by a group of 30, and enough plug points. Consult your in-house digital expert(s) about how much bandwidth you will need.

It is impossible to truly future-proof in terms of IT, as technology moves so quickly. Instead, assume that equipment will have a relatively short life-span. Build in the expectation that you will want to change hardware, possibly several times, within the lifetime of any space.

Projectors should be accessible to staff – they shouldn't have to clamber on chairs to get them. Remotes should be clearly labelled and kept in a safe place, with spare batteries.

Laura Southall, Head of Learning, Royal Institute of British Architects

**Top:** Projectors turn the walls into work space at Tate Modern

**Middle:** Group work using tablets at the Museum of London

**Bottom:** Discovery Film School Dundee, BFI Film Academy at Dundee Contemporary Arts

**Below:** Wall space becomes a focus for creative digital work at South London Gallery



## 2

Develop  
your brief

**Getting the cloakroom, lunchroom and toilet facilities right for your space and audience is key to a successful experience, and sets the tone for the rest of the visit.**

Using the 'day in the life' of your space and the visit walk-through will help you identify when groups will need access to these facilities and therefore what type and size of provision to consider.

Most learning spaces don't have room for coats, bags or buggies. There are transportable bins and racks that can be wheeled in and out and are collapsible when not in use: these are a good solution where dedicated cloakrooms and lockers are not available. Remember that when children put their coats on, they tend to 'bunch together' in the coat area – do you have sufficient space there?

Where will visitors eat their lunch, and how will waste be disposed of? Is there a water fountain? Bear in mind you may discover that most groups arrive and eat lunch at different times, so a welcome and cloakroom area could also serve as a lunchroom. Having toilets near these spaces is extremely useful.

The key issues about toilets are:

- Where they are sited. Can they be exclusively for those using the learning space, thereby addressing child protection issues?
- How they are fitted-out. Will a standard fit-out work for all your users, including children? Is safe-guarding a factor?

- How many to install. Will they be used regularly through the day or only for a short span of time? Will they cope with short periods of heavy use, e.g. 40 children in the space of a 15-minute break?
- There should always be accessible toilets for users with physical disabilities. If your site has aspirations to work with adults with disabilities, then installing adult change facilities, if there aren't others available locally, would be sensible. See [www.changing-places.org/find\\_a\\_toilet.aspx](http://www.changing-places.org/find_a_toilet.aspx) for local changing spaces

Cost will determine some of your choices. Some sites have toilets exclusively for everyone using the self-contained education centre. Fittings can be a mix of adult and child level, or accessible to both. The main concerns are that the facilities should be well-designed, robust, readily accessible, easy and inexpensive to maintain, child-friendly and safe.

If your audience includes families, consider where you want to install baby change facilities. If they are put in a disabled toilet, parents may feel awkward using the space unless it is identified as dual use.

# Cloakroom, lunchroom & toilets



**Above:** Tubs on wheels provide the coat and bag storage in the schools' cloakroom at National Museum of Scotland, Edinburgh

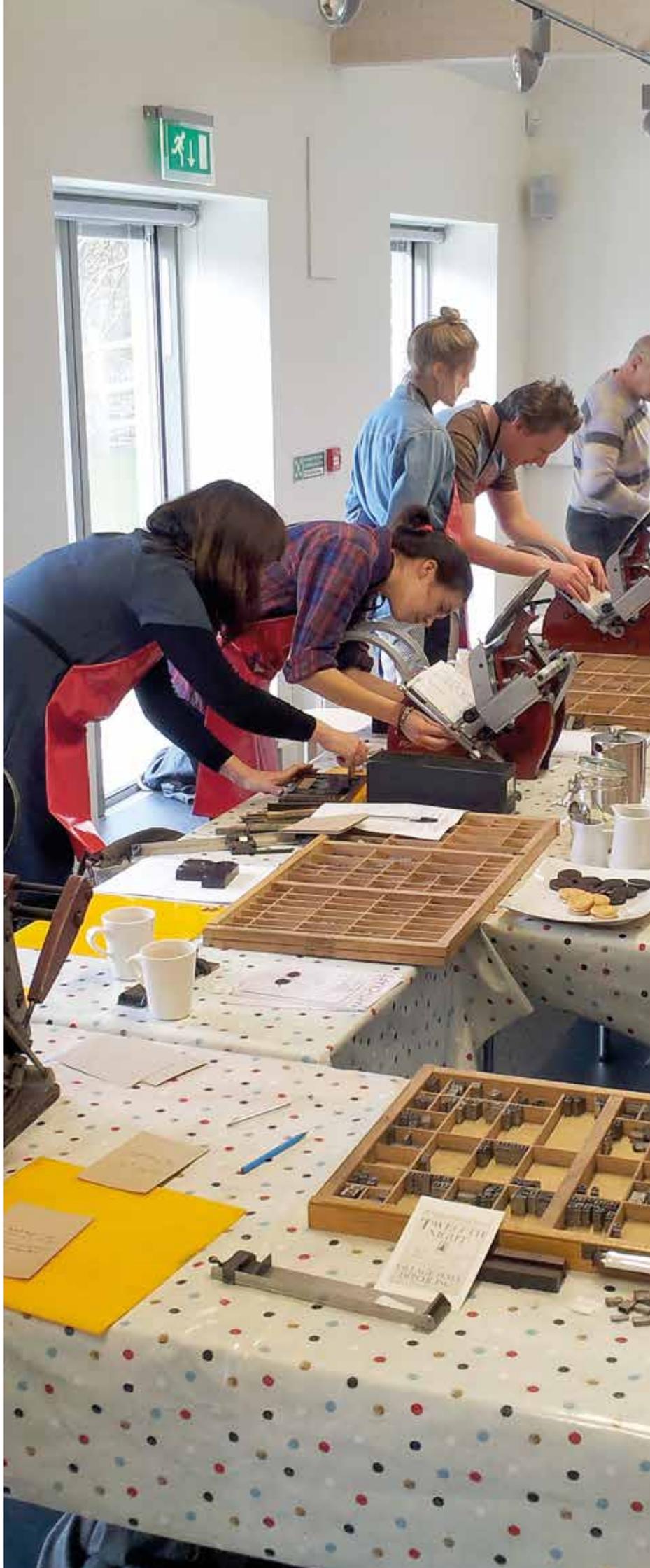
**Top:** Bleacher seating in the lunch area at the Science Museum, London: a class of 30 can be seated in each section

**Right:** Bespoke racking units for bags and coats at the Museum of London

# 2

Develop  
your brief

# Plan how you will run your space



**A key factor in the success of a learning space is how well it can be used, managed and maintained.**

The space must be compatible with numerous physical and learning needs, and cope effectively with organising people of different ages engaged in diverse activities. It must be easy to keep clean and run efficiently, with repairs and replacements easily made.

Consider the sustainability of the space – it will have to work on many levels if it is to earn its keep. Is it flexible/attractive enough to hire out in the evenings and generate income? Don't dumb down – make the space beautiful so that it works for all ages and has easily switched design components which can be swapped for children/adults or different uses.

Kathryn White, Museums & Galleries Development Manager,  
Kirklees Museums & Galleries

A management plan for how the learning space will be maintained, repaired and refurbished over time should be developed and kept up-to-date, and a budget should be assigned to it.

It is our recommendation, if your business model includes use of the learning space for hire or meetings, that the learning staff retain control of all bookings. If this is not possible, some organisations agree that spaces are available for other uses at specific points in the week. For example, at one major London museum the learning rooms are only available for external hire on Thursdays.

It is essential to implement clear booking procedures and expressly indicate the day-to-day management of functions, especially where a learning space will be used for other functions. The plan should include staffing, e.g. covering porters, cleaners and audio-visual technicians.

If learning spaces are available for use at different times for a variety of activities, the spaces will need to be cleared and set up efficiently. For example, at Dulwich Picture Gallery spaces are used morning, afternoon, evening and all weekends, with clear guidelines for how spaces should be set up and put away ready for the next session.

If the space is to be shared between learning and business hires, make sure that learning gets the priority and cannot be 'bumped' for more financially rich hires. (It is first come, first served with us, but learning sessions are never bumped.)

Sarah Orton, Lifelong Learning Officer, Gloucester Folk Museum



# 2

## Develop your brief

**A successful project will consider how the learning space's running costs and planned maintenance will be funded. When planning, consider which elements of programmes are income-generating, or could be, without excluding target audiences.**

Learning activities should be accessible, so if you decide to charge, think carefully about how you can ensure your pricing structure does not become a barrier for target participants. For example, many sites charge fees for learning sessions or family events. Fee-paying models where some places are funded and some subsidised can work well to ensure that everyone is able to access the site's provision.

Funders of learning spaces understand the need to plan for income generation. However, they will want to ensure that the primary function of a learning space is never compromised, and that the balance of fee-paying activity and open access is appropriate to the site's aims and audience needs.

Hire of the learning spaces can be part of the income-generation model, but first and foremost a learning space should be for learning activity: other uses should be seen as secondary.

### Corporate hire

Use of a learning space for corporate hire or internal meetings needs to be carefully considered, planned and managed. In our survey of learning officers, the most frequent response to the question, 'What makes spaces effective?' was flexibility. This flexibility ensures that a space can be used for a variety of audiences, as well as being appealing for corporate hire and meetings. There may be an additional cost to crafting a space that can serve these different purposes.

# Income generation





**Right:** Community workshop in the Gardens Pavilion at the Horniman Museum and Gardens, London

**Below:** Visitors at the launch of the Study Space, Manchester Museum



# 2

Develop  
your brief

# Budget



**Whatever the project, three costs are likely to be involved:**

- Consultancy costs – e.g. research, access, acoustic – to establish the right space and fitting-out for your needs
- Physical costs, including build, design, furniture, fittings and equipment
- The costs involved in running or maintaining the space, including staff and resource costs to achieve your learning outcomes with audiences, and maintenance costs

Remember to factor-in the costs associated with ensuring that a wide range of people can participate in consultations, including travel expenses and fees for facilitators. If building work is involved, there will be the capital cost of building or renovating the space, including professional fees and some contingency and inflation funds.

There is also the 'hidden' cost of staff time for those involved in the project, such as that spent on research, meetings, considering plans and documents, and visiting other institutions and sites.

Whether a learning space costs £500,000 or just a few hundred pounds, the process is the same:

- Clarify uncertainties or gaps in the budget for the learning space
- Involve someone in the team who understands costings and balance sheets
- Be prepared to negotiate for what you want, and renegotiate any unsatisfactory allocation of funds
- Establish a quality standard for materials used, and for the furniture, fittings and equipment to be bought

- Compare different materials, furniture, fittings and equipment before making a choice
- Estimate running costs for the space in terms of services, materials, and day-to-day maintenance
- Be realistic about what you can afford
- If you have to value engineer your requirements, think creatively about other solutions, assess the implications of compromises, and then make decisions
- Devise a future timetable for buying what cannot be afforded in the initial fit-out
- Create a business plan to sustain the ongoing work which will happen in the space

Inevitably at times you will have to compromise on costs. Reassess your needs and establish and negotiate for what is an acceptable compromise for your particular site and the activities you plan. Your consultation with audiences should allow you to prioritise the needs for the space, and therefore to make consistent decisions about what can and cannot be compromised.

Always ask three questions when deciding on costs:

- What is essential and cannot be compromised on?
- What can be set aside or abandoned without jeopardising your priorities or principles?
- What can be introduced or reinstated in the future?

**Left:** Painting in the Clore Learning Centre at the Museum of London

**Below:** Schoolchildren work with objects in Manchester Museum's Discovery Centre as part of *Ancient Egypt and Thunderstones* archaeology workshops



## 3

## Checklist of questions

This is a comprehensive list of questions you can use to shape the planning for your learning space. You can pick and choose the questions/sections that are relevant to your site/organisation – it is unlikely that every single question will be relevant but we hope that the list will provide a good starting point at the outset.

#### Planning your space

1. Do you have a specialist learning member of staff from the Senior Management Team leading the development of your learning space?
2. Do you have the support of a trustee with responsibility for learning?
3. Who are the internal stakeholders for the learning space?
4. What is your learning service's mission and values?
5. How does learning take place in your site?
6. What is your, and your service's, learning pedagogy?

#### Consultation

7. Does your consultation include those who plan and those who deliver your learning programme?
8. Who are your current audiences for the space, including staff?
9. Who might be your future audiences for the space?
10. Can you prioritise your audiences?
11. Have you planned appropriate types of consultation with your identified audiences to ensure they are comfortable giving feedback?
12. Why will your audiences visit the space? What do they want to do in the learning space?
13. How do your audiences want to feel in your learning space?
14. What specific intellectual and physical needs does each audience have? Are some learning styles preferable and/or more appropriate than others?

#### Inspiration visits to other sites

15. Have you visited other sites for inspiration, and taken stakeholders such as architects with you?

Does the space echo the themes of your collections and historic buildings? Does it inspire creativity and learning? Will it be fun to be in the space? Is it light and airy?

Kathryn White, Museum & Galleries Development Manager,  
Kirklees Museums & Galleries

**Future-proofing**

16. Can you include expansion space for trunking and wiring?
17. Can you easily change equipment like projectors or monitors?

**Working with architects**

18. Have your architects observed a learning session?
19. Are you confident they understand the needs of your users?
20. Do you have a good, strong, collaborative working relationship with your architect?

**Develop your brief**

21. What is a typical 'day in the life' of your learning space in term-time, weekends and holidays?
22. What will the typical visit by a group involve, from start to finish?
23. What programme and types of activities do you want to deliver in your space?
24. What equipment, furniture, lighting and storage do you need for each activity?

**Ambience**

25. How will all types of user be able to develop a familiarity with and feel 'ownership' of the space?
26. Would you know which organisation you are in, if you were transported into your learning space without seeing the rest of the site?

**Location & dimensions**

27. Are each of your spaces at least 98m<sup>2</sup>?
28. Does the location and layout of the space suit different ages and physical abilities of all users?
29. Can you locate your learning staff office next to the learning space?
30. Is your learning work visible to other visitors – e.g. are there windows in to the space or is the work produced there displayed for everyone to see?
31. How will audiences find your space?

**Storage**

32. Can you incorporate more storage?
33. If your audience includes children and young people with additional needs, have you allowed extra space for their equipment (e.g. air tanks, medications, wheelchairs, etc.)?

**Lighting**

34. Do you have a lighting plan for your space?
35. Can you adjust the lighting for bright task-based work or lower-level creative activity?
36. Can you blackout your space?
37. Can you spot light activity?
38. Can you spot light two speakers at once?



If you are doing a 'visit walk-through' for young audiences, ensure you do the same for your oldest visitors too. Older people require stable, comfortable chairs with arms and backs; you need to ensure that you consider lighting and acoustics in the context of their needs; they may get cold more quickly so remember to think about their thermal comfort; and reduced mobility may mean that more assistance is required.

Gillian Wolfe CBE, Design for Learning consultant

**Acoustics**

- 39. Do you have an acoustic plan for your space?
- 40. Have you considered measures to dampen noise in the space?
- 41. Can you sound-proof your space or ensure ambient noise does not rise above 35 decibels?

**Heating & ventilation**

- 42. Do you have windows that open?
- 43. Have you planned for how you will cool down your space?
- 44. Are your heating controls for the learning space separate from the rest of the building?

**Flooring**

- 45. Will your flooring be washable and easy to keep clean?

**Wall space & display**

- 46. Do you have one clear wall where you can display work or project on to?
- 47. Have you planned how you will attach displays to the wall?
- 48. Could 3D objects be available as handling collections?
- 49. Could there be opportunities to display other 3D objects or items (vitrines, display cases, etc)?

**Plumbing**

- 50. Does your wet area include at least one sink with double-bore drainage and a raked drainer?

**Furniture**

- 51. Are the fittings, furniture, equipment and materials used compatible with the range of users?
- 52. Is any furniture light weight and stackable?
- 53. Can you store away all of your furniture at once?

**Technology & digital**

- 54. Do you have enough power points for all the electrical equipment you might use in the room to be in use at the same time, plus additional plugs for your visitors' equipment?
- 55. Do you have plug points on or next to workspaces and surfaces?
- 56. Do you have mobile reception/Wi-Fi in your space?
- 57. Do you have enough bandwidth for 30 devices to use the Internet at the same time?

**Cloakroom**

- 58. Where will visitors' coats and bags be stored?
- 59. Will visitors be able to access bags during their visit, e.g. to retrieve lunch or money for the shop?



Pottery workshop in the Foyle Art for All Learning Studio at Watts Gallery Artists' Village

### Lunchroom

60. Where will visitors eat their lunch?
61. Where will visitors wash their hands?
62. Can you install a water fountain?
63. Can visitors buy food or drinks nearby your lunchroom?
64. How will your visitors dispose of waste?

### Toilets

65. Are there sufficient toilets near the learning space?
66. Have you considered including family facilities and gender-neutral toilets?
67. Can toilets be wholly or partly designed and fitted-out specifically for children, if they are your primary user group, or will a standard fit-out work for all users?
68. Can toilets be exclusively for those using the learning space, thereby addressing child protection issues?
69. Will toilets be used regularly through the day or only for a short span of time? Will they cope with short periods of heavy use, e.g. 40 children in the space of a 15-minute break?
70. Can you provide adult change facilities for adults with disabilities?

### Plan how you will run your space

71. Do you have a management, cleaning and maintenance plan for your space?
72. What system will you have for room booking? Which staff and audiences will have priority?

### Budget

73. Have you defined what is essential and cannot be compromised on in your brief?
74. Have you defined what could be set aside or abandoned in your brief without jeopardising your priorities or principles?
75. Do you know what elements of your brief could be introduced or reinstated in the future?

For further information and online case studies, visit [www.spaceforlearning.org.uk](http://www.spaceforlearning.org.uk)

If yours is an outdoor space, think carefully about the position to ensure the area doesn't get too hot or too cold – which direction does the weather usually come from, where is the sun? Make it bigger than you think it needs to be!

Abi Crutcher, Education Officer, Montgomeryshire Wildlife Trust



The Discovery Centre, indoor and outdoor space, at RSPB Minsmere, Suffolk

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