

## **GUIDE LINES for the development of Performance Spaces for Schools**

When developing a new facility it is of paramount importance that the client takes full active responsibility for the development of the design brief. Bring in specialist advisers where there is a perceived lack of knowledge or just to confirm the validity of the specification. As carpenters say, 'measure twice - cut once'.

Generally performance spaces need clear floor space and height, ideally proportionally balanced as the visual environment is an important part of the journey. It will also be necessary to take into account maximum numbers of performers, the types of performance activity, and expected audience capacity. Due note should be taken of those standards developed for dance.

Particular consideration should be given to providing access to all facilities by those with disabilities.

The list below is not intended to be exhaustive but indicative of those issues that need to be thought through when developing a performance space.

### **1. Stage/playing space**

The stage playing space, its size and position, is most often the starting point of any performance space design development.

The type, size and shape of the stage/playing area will be influenced by a number of factors some of which are highlighted below;

- Permanent or temporary stage?
- Is the platform area raised or at floor level [if the latter seats will need to be raised]?
- Is Raked [bleacher] seating planned or flat floor seating?

- Is a fixed Proscenium arch desired [needs house curtains] or is performance in the round preferred, or both? Multi-purpose spaces whilst potentially offering better value return tend to need higher capital investment to really work efficiently. If under funded the results can be lead to white elephants.
- What type of performance is desired or most likely - now and in the future?
  - Drama, musical, orchestral, dance or some other variation
- Is there a need to fly scenery, tracking for drapes and or overhead rigging points?
- Is there a need to achieve a black-out, for instance to use interactive white boards or projectors? [windowless spaces may be depressing to work in]
- Do you need of stage [wing] space?
- Will musicians need space to play in front of the stage [a pit]?
- What other non-performance usage could there be and how will this impact on priorities of use?
- Storage is likely to be needed for:
  - Chairs
  - Tables
  - Portable stage decks
  - Get-off treads/ramps
  - Drapes
  - Scenery
  - Loose equipment

Where it is likely that the applicant's scheme will include movement and dance, provision for a sprung floor will be a prerequisite. What are the other activities happening in the space? For instance will an orchestra rehearse on the main floor requiring a flat space? How long will it take to change over the space between different users and what staff resource would be required to achieve this and is it available for this?

It is important to consider the relationship between the audience and the performers, paying particular attention to sight lines for both adults and

children. Should the stage be raised above floor level, then consideration of access to and from the stage for performers as well as any scenery or dressings is paramount.

## **2. Lighting**

Lighting for performance spaces is divided into two categories:

### **2.1 House Lighting**

House lighting is primarily to enable audiences to enter and exit the auditorium. Its secondary function is to assist in creating atmosphere. It needs to have the ability to fade to blackout to enable the stage to take prime focus.

It may well be desirable or necessary to have both general fixed lighting and dimmerable house lighting. The reasons for this are quite straight forward.

In non-performance conditions uses usually require flat, general lighting over the whole area, which are able to be switched on for long periods but have a low running cost. Generally they do little to enhance the atmosphere of the space. In performance conditions atmosphere is very important and dimmerable lighting is an essential element of achieving this, however often these light sources may be more expensive to run and tend not to give the same overall coverage, hence two different systems can often be the most practical and economical solution.

### **2.2 Stage Lighting**

Stage lighting is provided to illuminate the performers and create atmosphere.

Stage lighting requires adequate rigging facilities, a control desk and dimmers, bespoke power and data cabling infrastructure. In addition a 3 phase power supply will be required. Adequate consideration needs to be given to:

- Location of rigging positions [ over playing area and above or to the side of the audience
- Location of control desk [good sight lines of performer's necessary] and dimmer rooms [access for wheel chairs can be challenging].
- Power needed
- Alternative dimmer control. This might be a pre-programmed control that untrained users could access and operate providing a pre-selected choice of stage lighting states in the space.
- Use of loose equipment
- Access to equipment for focusing and servicing
- Storage needs for loose equipment

### **3. Sound/AV**

Audio visual equipment plays an increasingly prominent role in both teaching and performance. It is important therefore to explore all potential uses. The range of uses could include; interactive white boards; film projection; performance related effects; conferences or/and even parties.

Consideration needs to be given to;

- Providing a blackout
- Overall design of the data network and infrastructure
- Location of sound desk [needs to hear performers]
- Location of amplifiers and speakers
- Location of projector/s and interactive white board technology
- Location of Projection screens, type and size
- Design of bespoke infrastructure and power requirements
- Loose equipment needs
- Access to equipment for operation and servicing

- Storage needs for loose equipment

#### **4. Costumes, dressings, properties and decorations**

For internal users these are often put together in class rooms elsewhere in the school so consideration needs to be given to their storage and transport to and from the performance space. One recently completed facility managed to introduce a 5 step level change between the old school and new build. This was the only non-level access point on the whole site.

#### **5. Storage**

This is often underspecified usually because little thought or research is actually done or given to evaluate what has to be stored and how much space it will require. It is helpful to ensure that those persons responsible for handling the equipment, chairs, tables, rostra and etcetera are actively involved in the process and are held responsible for detailing current and future needs. Due consideration should be given to location, access and security, will there be a need to use or/and store hazardous or flammable substances? Will external users require dedicated storage areas? Will there be a need for power or plumbing [washing machines, dryers or sinks with paint sumps]? Again the activities will drive the facilities required.

Please note that storage is an integral and necessary part of the completed project - it is not an optional item, necessary rather than desirable. Insufficient storage space will detrimentally affect the successful outcome of the project.

#### **6. Communications/CCTV/Security**

For performance there are particular requirements for communications between back stage staff and to be able to page artists to come to the stage. There is also a need to communicate to audiences the

commencement of the performance and necessary evacuation procedures.

N.B. It is unlikely that an audible evacuation paging system can also be adapted for selective front of house paging at an economic cost within the regulations.

Consideration therefore needs to be given to:

- How artists are called to the stage
- What system is used for back stage communication
- How audiences are communicated with
- Implications of security and evacuation
- Loop systems

## **7. Dressing Rooms**

Somewhere close to the performance area there should be space where performers can prepare themselves with adequate provision for changing. Washing facilities may also be required. When this happens to be for exclusive use of the educational facility, it is quite likely that these facilities will double up with classrooms or sports changing rooms. If this is the case then consideration needs to be given to how the allocation of use is managed.

## **8. Acoustics**

Good acoustic advice is invaluable in creating a usable performance space. It is important that acoustic advice informs the design process at an early stage. It is also necessary to contain the break-out and break-in of sound from the facility. In addition, undoubtedly there will be some structural transmission of noise that will need remedial consideration.

Too often kitchens are located adjacent to the performing space [often with a direct hatch access that only has a steel security grill providing separation].

Consideration needs to be given to:

- Suitable sound absorption in the fabric of the building.
- An acoustic design that provides an internal space suitable for the type of expected performance. This will most likely require specialist advice and the design and installation of both reflective and absorbent surfaces.
- Sound proofing isolation of adjacent facilities such as kitchens

## **9. Community use**

Where a facility is going to be used for community use, it is necessary to re-look at all the above areas from the perspective of an outside agency. Clearly access and security to the facility need a proper policy; however this on its own may be insufficient and separate access may be required which could result in additional staffing costs.

Consideration needs to be given to

- How to maintain security of the educational establishment given that not all visitors will be security checked prior to them accessing the facilities. Different arrangements may need to be made for companies using the facility on a regular basis
- That any statutory licences required for Public performance are in place.
- Front of house facilities - for instance where will the audience assemble prior to performance and at the intervals, especially if the weather is inclement. What facilities may be provided for catering, tea/coffee or alcohol [licence impact]. What opportunities might derive from a foyer space adjacent to the auditorium provide?

- Whether additional staff are required to service and maintain the space
- Dressing/changing facilities.
- Type of seating and capacity [not necessarily the same as used by the school pupils]
- Storage of special facilities
- Suitable contractual tenancy documentation

## **10. Ventilation/Plant**

Consideration should be given to the performance needs when developing all Mechanical and Electrical designs. Too often inadequate provisions are made for ventilation/heating. Spaces getting either unbearably hot in the summer months and often introducing an 'on-pitch' whistle or hum.

## **Conclusion**

These guidance notes are to assist the process and to aid communication between all users. A well thought out scheme should have no difficulty in providing a satisfactory output for assessment purposes.

This will not be possible without the active involvement of users and a process that is inclusive and rigorous in its design brief development.

It would be beneficial for applicants to visit different performing spaces, whether they be schools or professional theatres. These do not need to be exemplary in nature. Each performing space is unique and may be perceived to work well or badly however what really defines the success or failure of any space is the activities/work that go on in it and does the physical space enhance the experience or not. With new spaces, say like the Tricycle Theatre in London, the contribution of a clear understanding of what was required by the client's team has been paramount. If you have a clear understanding about what it is you want to do, visiting other spaces will allow you to check and challenge constructively what would work for you

and what won't - whether the things that work for those others or not has any bearing on your requirements for space/need. You will be able to make your own judgements on both the design and your experience of it. It is therefore less important that a specific space be an example of 'good practice' as often more is learnt from what has gone wrong. It is therefore useful to have as many experiences of different venues as is practical and possible. Ideally you should record your experience, making a commentary that covers all aspects from its feel and look to how well or badly it services the needs of the organisation - make particular note of both good and bad ideas. In this way it is possible to subjectively review and learn from your experiences to positively influence your own project and its development.

In summary the user specification serves two purposes:

- To provide a clear understanding of your activities and parameters so your design team can develop the bespoke solutions to provide an environment that is fit for purpose.
- To give you, the client, a base line set in well defined need to allow you to check and challenge those solutions throughout the process

Finally, new technology has a role to play in your new space however remember that there is a significant cost for this both in your initial capital purchase and for running and maintaining the equipment. Ensure yourself that solutions proposed to you by your design team or/and users really are going to enhance what you do, will be used and that you have a staff resource that can operate them.

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Useful web sites

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

[www.harlequinfloors.com](http://www.harlequinfloors.com)