

New Technologies

Consider whether to invest in new technologies for your learning space. Ask the following questions:

- Why do we want it?
- Is it essential to our vision and our programmes?
- Will we receive ready and sufficient technical assistance?
- Will we be able to match or surpass what schools can offer?
- Will we be able to upgrade regularly?
- Will it help us to make better use of our resources?
- Can we afford it in terms of initial installation, running costs, and upgrading?

Despite numerous government initiatives, access to ICT remains restricted across museums and other cultural and environmental sites, according to our surveys in 2002 and 2003. Most sites say that access is poor, and 15% of non-nationals have no access at all. Some sites want it but cannot afford it.

The education staff would very much like to be able to provide computers and Internet access, but this is an area where facilities in the Museum as a whole are severely limited – the education team have a joint email address and Internet access from only one computer. (Extract from the Ulster Folk & Transport Museum case study)

Other sites have decided that ICT does not suit the work they do, nor the vision they have for their learning space.

However, some sites do build an ICT or e-learning requirement into the design and fitting-out brief for a new space, or ensure that the space is wired up for potential future development. The Technquest science centre finds that technological improvements are making it easier, in practical or building terms, to upgrade infrastructure and facilities. Everything is getting smaller.

When deciding on the provision of technologies which support teaching and learning – including televisions, videos, whiteboards and plasma screens – it is vital to ensure that the location of the equipment in a space does not restrict use for other learning activities. Equipment needs to be used as flexibly as possible, but always bearing in mind the need for security.

Those with limited resources often install only a modest level of facilities or put off going down the ICT route altogether. They argue that it is wiser to focus on what the site can offer that is different or unique rather than compete, largely unsuccessfully, with schools. One head of education explains that 'it is handling objects that is important because you can do that here but not in the classroom'.

Others, like Bishops Wood, consider that it is better to use new technologies to reach beyond the learning space itself – to provide preparation opportunities before visits, and continuing resources for learners through weblinks and downloadable materials.

The science centre @Bristol sees part of its future as extending interactive opportunities internally, and developing more sophisticated links between the centre and learning individuals and groups in schools and elsewhere through broadband technology, video webcasting and conferencing.

Where to start

When planning for new technologies, consider the following:

- How compatible is your building with new technology installation and use? Identify any problems with the building's structure

Access to the Internet is limited by the structure of the building, which has exposed concrete ceilings and no grids or holes for cables. (Extract from the River & Rowing Museum case study)

- What arrangements best suit you and your users? Consult users as well as staff and ICT experts
- Do you have sufficient space for what you want? Assess the space required for your needs and the options available for installation
- Can you afford the type and level of facilities that will deliver what you want? Decide the type and amount of equipment and networks you want, e.g. monitors, laptops, broadband or wireless facility, whiteboards, scanners, colour printers, and software. Acquire estimates of the costs involved in constructing or refurbishing an ICT space, buying the equipment, installing and maintaining it

- Does your space allow for adaptability and future change? Plan the infrastructure, such as building design, whole site networking, and trunking routes, to allow for spare capacity and the opportunity to extend and upgrade facilities

- Do you want a separate ICT suite or integration with the learning space? Discuss why, and where, you want ICT facilities

- Would you prefer the mobility and flexibility of laptops? Assess the need for and extent of security measures

The property manager was previously facilities manager in a large Secondary school and knew from experience the need to over-specify in terms of cabling by 400%. (Extract from the River & Rowing Museum case study)

The Lighthouse incorporated new technologies into its Education Workshop from the start. The brief required a multi-functional facility for hands-on learning, e-learning and reflective learning. The result is a large, rectangular room with high windows along one side providing good natural light. It can accommodate up to 60 school-aged students. A bench runs along the length of the windows to house Apple Mac computers. An overhead power track and wall-mounted sockets ensure that computers and electrical equipment can be used flexibly in the space. The space has coped with the growth of computer-based work well beyond the original plans four years ago. An increase in computers in the Workshop has been supplemented by a mobile computer trolley housing ten i-books.



'When classes come here ... they're not here to look at a computer, they want to see the real thing.'

David Blair, Freelance Educator, Bolton Museum & Art Gallery



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Extract from the River & Rowing Museum case study

