



Vertical take-off

It has long been recognised that climbing can be an effective vehicle for delivering education and personal development. However, while the UK has many climbing venues ranging from sea cliffs through to small urban gritstone edges, the challenges these locations present can preclude access for all but specialist outdoor pursuits providers.

IT IS NOT surprising then that there has been an explosion in the number of artificial climbing walls in schools and colleges. Climbing walls present a range of challenges from design through to build and management that are quite different to other sports facilities. They also present a number of far reaching opportunities, suggests Emma Flaherty, key project coordinator at Links School Sports Partnership. "Schools are a hub of the community and climbing is brilliant for engaging the community in education, which ultimately will encourage new partnerships and opportunities for all," she explains.

It would however be simplistic to suggest that all the potential benefits of a climbing wall can be achieved without an understanding of the distinct issues surrounding the integration of design, build and management of a climbing wall.

The structural aspects of building a climbing wall will of course follow the design but as Paul Myers of Rockworks says, "integrating a climbing wall to an existing structural design poses a range of challenges not met when the initial design accommodates the wall."

Clear space

One area which frequently causes conflict between the wall design and other planned uses is the issue of 'safe falling zones'. The European standard for climbing walls, CEN 12572-1 requires that the wall requires space around it of at least 2m behind and 1.5m to either side. While this standard appears to present few problems, the location of stairwells and doorways can, in effect, radically limit the design options and consequently the uses to which the wall can be put.





Climbing Walls are becoming a familiar feature in new build sports halls. Manufacturers have devised innovative ways of ensuring that climbing facilities don't impinge on other hall uses.

Such considerations have become routine for designers of climbing walls, who are accustomed to working around pre-existing structures. "Climbing Walls are now becoming almost standard additions in new build sports halls and manufacturers have found a selection of innovative methods of ensuring that their climbing facilities don't impinge on other hall uses," says Colin Boothroyd of Entre-Prise UK.

The involvement of the climbing wall manufacturer at the earliest stage of design is likely to impact on the plans in the adaptation of design of the foundations and exposed steelwork to ensure that the steel substructure of the climbing wall can be fitted without undertaking additional works. As Don Robinson of DR Climbing Walls says, "when building a wall, anything is possible however additional complications get very expensive very quickly."

Of course capital projects such as new sports centres and facilities such as climbing walls are not low cost projects and as ever funding is an issue, however whether a project is within the auspices of the BSF programme, facilities which create learning environments that can

inspire students to unlock their full potential and provide community access to high standard facilities are more likely to receive funding than projects which serve fewer objectives. Steve Mayer, director of The Beacon, a dedicated

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climbing centre in North Wales, told *edb*: "When we opened The Beacon we saw it first and foremost as a climbing centre for climbers, now in addition, we see the centre as vital tool for social work groups, youth offending teams as well as those working with adults returning to education."

Risk factors

The inherent dangers associated with rock climbing and, on occasions, its ▶

The DCSF strongly encourages schools to share their facilities with their local community, including sport facilities. In certain circumstances, schools can generate income by opening up their facilities to other users, and it is possible to get outside groups to fund facilities such as a climbing wall in return for regular usage.

Photos courtesy of Entre-Prise UK.



Getting started

A school traverse wall can be installed from as little as £1,500; free standing boulders from about £3,000

The Climbing Wall Award, which is designed to allow those not experienced in climbing and rope work to manage a group, costs in the region of £200, route setting courses around £300 (plus VAT).

The number of installations in schools has almost doubled over the past two years in part due to the application of the new content in Key Stage 2.

precarious setting, do not carry across to the climbing wall environment. The British Mountaineering Council's Climbing Wall Manual records that there are fewer than 30 major injuries recorded over a three year period. However, for the climbing wall manager there are a number of risks associated with running a climbing wall, particularly where there is a mix of user groups and a combination of instructed and unsupervised use. These range from minor thefts of other users possessions or equipment from the wall through to users taking improper risks, for example by climbing without ropes when ropes are needed.

The design and location of the wall can either ameliorate these risks or exacerbate them, says the Climbing Wall Manufacturers Association. For example, if the wall is in direct sight of the reception desk then users misusing the facility can be challenged whereas if the wall is out of sight, then in the absence of CCTV and all the attendant issues that that may arise, there is little chance of intervening in improper behaviour and so managing the risk.

Climbing walls present a major opportunity to bring innovation to a sports build and extend the reach of the facilities to a wider community than traditional facilities, says the Association.

Climbing is now regularly used as a form of learning outside the classroom and for non-formal education, team building and personal development. However to achieve the potential benefits of a climbing wall, the design of the wall must reflect the needs of the intended user groups.

If a wall is intended to be used by users over a short period, perhaps on a week long residential course with a low revisit rate then a design of a largely fixed wall might be appropriate. However, if the wall is designed to be used by groups over a sustained period of time with a high revisit rate then the reverse would be true and the better design would be one which was highly flexible, allowing new routes to be reset to present new challenges and keep the users interested.

www.beaconclimbing.com

www.drclimbingwalls.com

www.ep-uk.com

www.links-ssp.co.uk

www.rockworks.co.uk
