

# Eco-friendly design

Buildings that link to the surrounding landscape

also in this issue:

## Management

Councils want local oversight of all school finances

## Interiors

Enabling different styles of teaching in the classroom

## Sport

More state-educated athletes succeeding at elite level





# Eco-friendly extension supports 'forest school' ethos

The extension for Mellor Primary School in Cheshire – close to the Peak District national park – provides a series of stimulating new spaces based on the school's 'forest school' principles.

THE LOW energy building, designed by Sarah Wigglesworth Architects, aims to harmonise with its natural setting, using locally sourced natural materials while featuring a striking habitat wall which was designed and built in partnership with the school's pupils.

The extension to the existing school is an innovative and sustainable building containing an additional classroom, SEN room and library, an extended hall, new WCs, an outdoor equipment store and other facilities. The existing building has also been partially remodelled to provide better offices and improved connections between the community space and teaching areas.



The architects worked closely with the school community during the design development phase. Meetings were held with staff, parents and governors, and feedback from the Mellor Pupil Parliament also informed design decisions. Construction of the 226 sqm building completed late last year was achieved on a budget of £591,000.

## Outdoor classroom

Links to the surrounding landscape are fundamental to the design. The school believes that learning through the outdoor environment is key to helping children build resilience, resourcefulness and an ability to work together. This philosophy is



Images: Becky Lane



embedded in their Forest School programme, and aims to encourage a love for the environment while developing skills and knowledge. New internal and external spaces support this pedagogy – such as covered external deck areas which can be used as outdoor classroom space as well as for informal play.

The extension is in effect a 'tree house' – a cluster of pitched roof forms set on a deck extending out into the landscape. The dominant material is timber; a robust, low energy and sustainable material that reflects the school's Forest School activities and allows the expanded building to sit comfortably in its Green Belt setting.

Tree-like glulam frames support not only the deck but also the roofs internally and canopies externally, making a visual connection between internal and external spaces. The new classroom and library enjoy views into the surrounding tree canopy.

A key external feature is a habitat wall. This is a thickened wall on the east elevation, and is built as a framework for accommodating different types of biodiverse habitats: birds, insects, small animals and plants. It takes the form of timber compartments which are filled with a wide variety of recycled and found materials, as well as areas for planting, bird boxes and bat boxes.

Pupils were invited to develop their own concept drawings for how the wall might appear and, during construction, worked alongside teachers, parents, the local community and the architects team to fill its spaces

[www.swarch.co.uk](http://www.swarch.co.uk)

## Use of natural and reclaimed materials

The design is constructed of natural materials such as timber shakes and straw bale insulation as well as reclaimed materials, for example tyres used within the landscape to form stepping stones. The design incorporates a 'habitat wall' on the east elevation. This is made up of a range of reclaimed materials and is designed to promote biodiversity by providing planting pockets, nesting boxes and bug habitats. The below deck area is screened by a trellis which is planted with native species. Rainwater is collected and used for irrigation. Water saving fittings and low energy light fittings are standard.

