



# Awards 2014 Case Study

Award Winner

## Project of the Year

Coleg Cymunedol y Dderwen

The bar for performance and outcomes was set as high as it could go by stakeholders working on the Coleg Cymunedol Y Dderwen school development in Bridgend.



They set out to establish 'one of the best frameworks ever', according to Simon Owen of main contractor Leadbitter, to achieve BREEAM Outstanding rating and to be considered an Exemplar project. In close collaboration, they achieved all these goals and were voted CEW's Project of the Year 2014 as a result.

In fact, CEW judges maintained it was hard to find fault with the £36.6m project to design and build a new secondary school for Bridgend County Borough Council, bringing together in one new facility two existing schools that were no longer fit for purpose. It is Exemplar on every front from sustainability, local investment and engagement, to learning environment and community hub. The resulting building is inspirational for staff, pupils and community alike and lays down future best practice for truly sustainable buildings.

As a Gateway to the Valleys school modernisation initiative, expectations of Y Dderwen were high, and extended well beyond its core educational function. The strategy for the scheme was that it would create a landmark building and grounds that demonstrate the value placed on the local community; act as a base for a multi-agency hub, offering support for young people and the wider community; establish a successful partnership

between public, voluntary and private sector groups that would utilise the school and its facilities, and provide a building that is environmentally and economically sustainable.

During the contract period, between October 2011 and July 2013, this was the biggest education project under the SEWSCAP Framework and the team from Leadbitter, who had worked on other projects within the framework, decided this was the ideal opportunity to put everything they had learnt into practice to create something outstanding.

With the vision of architects Scott Brownrigg, combined with the buildability knowledge of Leadbitter, the building's groundbreaking design has resulted in the first carbon neutral school in Wales. It boasts a 21st century completely wireless network and 'out of this world' technology. Another first for Leadbitter was building the Danish design Hellerup

Award Sponsored by



# Involvement of pupils, staff and the wider community throughout the development was exceptional and helped forge a sense of ownership amongst the local population.

staircase that doubles as seating for the central atrium come auditorium. The 'schools within a school' concept, means there are independent teaching wings, as well as the dedicated community use wing, radiating from the atrium.

All aspects of sustainability were central elements of this scheme. By introducing a CHP tri-party agreement, excess solar power generated from the school site could be used to heat the adjacent swimming pool and home for the elderly, resulting in a BREEAM rating of 89.2% and the EPC of 0. They also achieved 100% diversion from landfill of non-hazardous waste, with more than 90% of aggregate used from recycled sources, and low impact materials were used throughout construction with a focus on product lifecycle and maintenance impacts.

Simon Owen admits that some targets were difficult to meet, in particular those regarding community engagement and local employment, but they exceeded even these. Of the total contract value, £22m was spent within 10 miles of the site and work was found for an astounding 132 new entrant employees, against an initial target of 34. "This is an issue that comes up regularly at industry meetings and we are asked how we achieved the targets," said Simon. "Our response is always that you have to set out a coherent plan of action from the start: you need to take local people on and then provide continuity of employment, not just drop them at the end of the project. Our achievements show it can be done."

Involvement of pupils, staff and the wider community throughout the development was exceptional and helped forge a sense of ownership amongst the local population. The project team organised 76 school engagement and 36 community engagement activities, as well as issuing 13,000 newsletters.

Not only was part of the new build just 2.5m from the existing live site, but work took place during one of the wettest winters on record, forcing up to 220 contractors to co-ordinate work on site to make up lost time. The potential for accidents under these conditions was high but, despite a total of 463,663 man hours worked, there was just one recorded incident. Communication with students and residents was an essential element of site safety, as well as careful planning and risk management.

The strategic thinking employed on this scheme, robust framework and rigorous process, along with the collaborative efforts of all parties to attain the highest levels of attainment in all areas of the build, and strong leadership from the client in committing to early contractor involvement were all elements that contributed to the strength of this project.

But the ultimate test of its success was in the experience of the end user. Coleg Cymunedol Y Dderwen's head teacher Andrew Warren spoke for them all when he said: "The team has a real and deep understanding of how space can be used to support educational innovation and transformation.

"Much more than this though has been the truly exceptional level of engagement ... with the whole of the school and wider community. It has been their enthusiasm and genuine excitement for this project that has been instrumental in making it a total success. Without this level of real engagement, real partnership and real energy, we would not be where we are now – occupying a world class building that supports all of the many curricular, pedagogical and relationship transformations that we wish to introduce; we would simply have been unable to deliver this without the fabulous design."

