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## partnerships for schools

As a Primary Capital Programme Pathfinder project, Ealing Council's strategy for the John Perryn Primary School was ambitious and forward-looking.

This case study looks at the council's aim to support the school coming out of special measures and to improve the teaching and learning environment by developing an enhanced building fit for 21st century learning.

### Key project information

**School:** John Perryn Primary School, Acton, London  
**Local authority:** Ealing Council  
**PCP Pathfinder project cost:** £8.9m  
**No. of pupils:** 420 primary school + 50 nursery  
**School opened:** April 2009

# Lessons learned from a Primary Capital Programme pathfinder project: Ealing

## Project description

The new school houses a two form entry primary school with a 50 place nursery with large classrooms and outdoor play and teaching areas. The school's aspiration was for the design to be flexible and adaptable with both formal and informal teaching, learning, gathering and social spaces.

In a 17-month transformation, John Perryn was rebuilt from scratch on the original school site and was procured on a Design and Build contract through Ealing Council's Contractor Framework. The site is located on the edge of a large residential, semi-suburban/industrial area and slopes around 4m over its length from West to East.



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Great emphasis was placed on community use of the school's internal and external environments and incorporates an integrated 25 place children's centre, adult learning rooms and a multi-use games area (MUGA). The school also now has facilities and meeting rooms to accommodate a vulnerable children's unit and Traveller's children and their parents who make up to 10% of the school population.

## Innovation in sustainability

The school was constructed from pre-cast concrete frame which acts as a heat sink preventing the building from heating up too quickly in the summer and cooling down in the winter. The pre-cast panels were a fast, economical and pre-finished system which reduced the programme time and waste generated through the construction of the structural frame.

As a site rule the insistence was that if you produced waste you had to dispose of it properly. This encouraged recycling and reduced the number of skips. Demolition materials were recycled, eliminating waste to landfill, and crushed glass was used as an alternative to quarried sand, saving 150 tonnes of materials. Desks and chairs from the old school were also donated to schools in developing countries thus avoiding even more waste from going to the landfill.

# Lessons learned from a Primary Capital Programme pathfinder project: Ealing

## Energy

A large ground source heat pump was installed to minimise the school's energy consumption and Carbon Emission levels. The under floor heating contractor also issued heat detectors for use by the students as a learning tool.



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High specification glazing is used throughout the school to minimise glare, remove solar gain and improve U values of all windows, curtain walling and the roof lights. Higher reflection from the paint was also used in the breakout teaching areas to reduce the need for higher artificial lighting by 20%. Stack ventilation chimneys were introduced into all classrooms to allow natural ventilation in conjunction with the windows.

## Green ideas

The landscape and the building can be used as a teaching tool, including the first floor 'Teaching Terrace'

## Key contact

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## Further information

For more details on Ealing's Primary Capital Programme and the Primary Strategy for Change: <http://www.ealing.gov.uk/services/education/psc/>  
Constructing Excellence: <http://www.constructingexcellence.org.uk/>

which features a sedum roof and has potential space for meteorological apparatus and photovoltaic cells. Trees that were removed from the site were chipped and cut into logs for use on site as footpaths and as wildlife habitats. Sustainable urban drainage system has been installed under the sports pitches to prevent sudden flooding from entering the main drainage network.

## ICT Infrastructure

The school benefits from a unified single ICT infrastructure which offers: a full high availability data network, full wireless coverage, fully multicast ready and IP telephony services. The solution was designed to improve and future-proof the school's ICT requirements and to accommodate for changes in the months and years to come without extensive investment. Effective use of virtual learning environments, which recognise the use of technology to deliver the benefits of personalised learning and provide an 'e-enabled' school were key features which assisted in the development of the learning platforms to support improving standards within the school.

## Constructing Excellence

The project has been accepted as a demonstration project with Constructing Excellence, the body responsible for improving industry performance in the areas of collaborative working and sustainability.



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