

BuildingFutures
AWARDS
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BUILDING TRUST



Award Category: Design Excellence sponsored by Sika

Project: The Bushey Academy, Watford

Client: Hertfordshire County Council

Project Team: Architects Co Partnership, Kier London, WSP UK Ltd, Edco Design London



The Bushey Academy is a modern, energy efficient school with innovative learning environments that have a positive impact on the aspirations and educational achievements of its students. The project's success was thanks to the collaboration of architect and client.

In 2008, only 14 percent of students at Bushey Hall School achieved 5 grade A* to C passes at GCSE level. Since opening as the new Bushey Academy in September 2009 the school has seen a year-on-year improvement and this summer produced its best ever GCSE results with 100% of students achieving 5 or grade A* to C passes, and 'excellent' A Level results as rated by ALPS.

A major contributor towards this improvement was the new building - one of the last to be constructed as part of Building Schools for the Future (BSF) initiative to replace unsuitable teaching accommodation in the existing school, which was built in 1928. The new academy provides accommodation for 1350 pupils including 300 post 16 students with the twin specialisms of Business and Communication.

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The key objective was for the design of the new buildings to reflect the school's business ethos and prepare students for life in the outside world by giving them the opportunity to experience, and therefore aspire to, a business-like working environment.

Not without its challenges, The Bushey Academy's build project, which was only fully completed in March of this year, encountered problems as is the case with all schemes of this nature. However, winning the Building Futures Award in November 2013 for "Design Excellence" recognises the outstanding collaborative work undertaken between the client and Architects Co-Partnership (ACP).

Past experience and the consistency of staff throughout the project was paramount. The input of the client was key, being able to have a full overview by being present throughout the course of design and construction. Great investment in time upfront was deemed key and prevented issues later down the line.

Students and staff were also involved throughout the process with a team of ambassadors working on concept designs. Department heads were presented with these and detailed drawings of all the classrooms and facilities for their feedback from the outset. Full meetings took place every fortnight to agree and document actions and ensure a paper trail for future reference. Consultations took place at every stage – initial, review and sign-off.

The project was also used as a basis for additional learning and assemblies were held to discuss reasons for decisions made and to present ideas. Located within a Conservation Area and adjacent to the old school buildings, English Heritage had a large involvement in the project and came into the school on a regular basis. At one such assembly the preservation of the school's clock tower, which needed to be moved, was discussed. The solution was to move it brick by brick to another location.

The client worked very closely with Architects Co-Partnership from the beginning, drawing on past experience in other academy projects to give clear instructions. Sub-contractors were also brought in at the design stage and formed part of the steering group where relevant, for example in choice of furniture which was so important to the client.

There were some compromises to be made and but other certain needs were simply too important to compromise. As an example, the school's theatre has a wide span roof and the suggested support columns would have had potentially interrupted the view. A solution within budget was found and the theatre itself now provides a source of income for the school as it is hired out to the local community and has even hosted the BBC's 'Any Questions' programme.

The new academy has been created alongside the retained early 20th century buildings adjacent to the Conservation Area. The contemporary architecture creates a stimulating learning environment in the green belt and is deliberately designed to provide a unique character that is distinct from, yet respectful of, the adjacent historic buildings, which has been supported by English Heritage.

Externally, the new academy buildings comprise of a varied combination of glass, brick, aluminium shingles and colour-punctuated render to create a visual interest without dominating adjacent buildings.

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The main entrance is a transparent façade created by a three story glass wall. The entrance opens into the main atrium, an inviting space flooded with light and kept warm by underfloor heating in the winter which provides a variety of informal meeting and teaching, dining and gathering spaces.

These teaching spaces extend in an arc overlooking the playing fields and green belt, orientated northeast and northwest to prevent summer overheating and providing a comfortable learning space all year round.

Central to the building on the first floor of the atrium, the Science Mega Lab is enclosed by a glass curtain wall. This was a vision of the client, who wanted a room that could be used solely for experimental work and thereby saving time as equipment does not need to be cleared away before general teaching can continue in nearby classrooms. Younger students are inspired by the experiments of their older counterparts at the 30 pods which can accommodate up to 90 students at a time.

At the centre of the academy is a cloistered quadrangle with a central grass area that students can also enjoy all year round. At the centre is the rebuilt clock tower approved by English Heritage. A covered double height ETFE canopy for the pupils and staff provides protection in all weather conditions and runs along the northern elevation with the eastern elevation of similar construction.

The community park and open space to the front of the building has been enhanced with new tree planting, paths and seating. The community entrance to the west elevation, facing the car park, consists of a double height glass curtain wall with brise soleil across the drama studio, resulting in an understated yet powerful secondary entrance. The Bushey Arena theatre is clad in aluminium shingles to create a unique identity by reflecting light and breaking up the façade with its diamond pattern.

Innovation was at the heart of the design from the materials used through to facilities made available to students and teachers. One such innovation is a laptop 'desk' in classrooms, which pivots out of a cupboard, which itself doubles up as a whiteboard. Time, space and cost saving measures were at the forefront of design decisions. One type of light bulb was used throughout the building and the same desks and chairs can be found in each classroom, thereby enabling bulk buying and reducing expenditure.

A suite of locks means there is one master key for the whole school with sub-keys for different zones and individual locks for classrooms to ensure efficiency and safety. An open and approachable central library area was incorporated into the atrium, the walls of which also acted as sound barriers.

In addition to winning the Design Excellence award, the Academy has had a lot of positive feedback from locals and the recent academic results also underpin the positive impact the building is having on students and teachers alike.

The whole local community is benefiting from the work undertaken as the academy is open out of hours, also known as the "Bushey Arena", and is used for exercise classes, parties and events.

Principal Andrew Hemmings, said "We are very proud to have achieved such recognition for our wonderful building. The building is a genuine and extremely successful amalgamation of

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functionality and design which has resulted in the provision of outstanding facilities, enabling us to deliver innovative and individually targeted learning to each and every one of our students. Every space in the academy has been designed with only one thing in mind - how to best enhance the experience for our student and provide them with an environment within which they are able to fulfil their potential. I am pleased to say that the design of the building does just that."

Judges comments:

"The Bushey Academy is an inspirational new building which has evolved from a highly successful collaboration between client and architect. As soon as you enter the building you realise that this is a very special place that has resulted from a clear vision about how an Academy should work, and in particular how it should work as a social as well as an educational environment. This vision has been carried through by the architect to create a welcoming entrance and central 'market place' atrium which is the social hub of the Academy and which also contains the Learning Resources Centre in a cosy and distinctive glass fibre 'egg'. The teaching spaces extend from the Market Place and are orientated northwards to avoid overheating and to take advantage of superb views across the surrounding mature landscape. The scheme has retained and refurbished two existing 19th century buildings and has created a calm and more formal 'court' that links the old with the new. This is an exemplary building in every respect."