

# Rise and rise of inner city schools

Taller, denser, more complex school designs are helping urban families to build city-centre communities

Words: Josephine Smit

Look up at a new city apartment building and you may spot a colourful plastic wendy house on a balcony or a family of soft toys looking back at you through the full-height glazing. While contemporary urban living is associated with young professionals, the toys are a reminder that there are children growing up in the city.

This has resulted in a number of schools being provided as part of residential schemes in London and other major cities. Economic realities and the city context are driving designs that can differ significantly from the more standardised solutions being delivered elsewhere. While schools are often enabled by housing through Section 106 agreements, in some urban locations it is the housing provided alongside or above the school that is key to overall financial viability. At the same time, the funding provided by the government's Education and Skills Funding Agency (ESFA) is far from generous and available urban sites can be constrained and costly to develop.

To make the urban school stack up literally and financially, often playgrounds are replaced by rooftop multi-use game areas and children can expect their classrooms to be higher up the building as they progress through school. And these are by no means the only ways architects are looking to make the most of the site.

## Placemaking potential

'Ultimately a school has to be robust and flexible. It must be well-designed, well-built and delivered in partnership with those who will be running the facility.' That's how John Mulryan, group managing director of developer Ballymore, defines the company's approach

to delivering schools via Section 106. It plans to include two in its upcoming Mill Harbour scheme, in London Docklands, and incorporated a primary into the nearby 3,300-home Royal Wharf development.

The developer sees schools as integral to placemaking, having combined one with a private nursery and community centre to form an education hub at Royal Wharf. 'It's incredible for our 10,000 residents to have this sort of social infrastructure on their doorstep,' says Mulryan. Royal Wharf Primary had to be special, he adds. 'Its aesthetic helps it stand out from the other buildings, which makes it easy to find, but more importantly creates something special for the children.' The design was developed with the input of its school head. Tim Weeden, associate at Feilden Clegg Bradley Studios, says, 'Ballymore brought us in as schools expert and

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**Above** FCBS' City of London Academy Shoreditch Park, part of the Britannia Project masterplan, champions the idea of the low-traffic 'school street'. **Right** School meets homes in Henley Halebrown's Hackney New Primary School. The courtyard school is appended to the 11-storey residential block that helped make it viable.

**Below left** Lungfish Architects' design for a one and a half form entry school in Derby. Planning nous squeezed the school onto an alternative site that was half the size of the original.

**Below right** Internal corridors at Hackney New Primary School were exchanged for cloisters and covered open walkways around a courtyard.

was happy to work with us and the head to provide more than a base ESFA school. They wanted a school to be proud of.'

The design meets the head's requirement for a three-form entry school, allowing smaller classes of 20, and provides three playspaces for different age groups, with younger years at ground level and the oldest using a rooftop space. The school occupies a prominent site on the corner of the high street and fronts onto a pocket square. It therefore has to sit comfortably with both its high street neighbours and the townhouses and apartment blocks of Royal Wharf. This challenge has been resolved in visual connections with Royal Wharf and by asserting the school's civic stature. Feilden Clegg Bradley Studios partner Sara Grohmann says, 'The school is clad in a particular type of brick and given a monolithic appearance with



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a colonnade along the front. We've dealt with the common issue of the front fence along the school by creating the colonnade, which is integral to the development. There is the opportunity for architecture to speak at a civic level when designing a school. It wants to read as a seamless urban environment.'

The seamless urban environment includes the street itself, something explored in the architect's masterplan for the Britannia Project, in Hackney, east London. The mixed use regeneration project, led by Hackney Council, combines replacement of a leisure centre with development of 481 homes and a 1,100-pupil secondary school, the City of London Academy Shoreditch Park. Long before recent interest in low traffic streets, the masterplan promoted such ideas for the street fronting the school. 'The idea of school streets is now taking hold, but locating it in the way we did made the council address the roads and ask whether cars really needed to go there,' says Weeden.

Grohmann is realistic about the constrained

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sites of these and other projects. 'You have to make the most of the site you have. We try to use the allowance of space for the ground floor to create a convivial environment. In Royal Wharf the main central staircase creates almost an amphitheatre environment; internal circulation spaces can perform a number of purposes.' One area where the architect routinely challenges ESFA assumptions is corridor width. While some ESFA models have 1.8m wide corridors, the architect works to produce 2m as a minimum and 2.4 or 3m in some instances.

The ESFA approach could see more significant challenges in future, Grohmann believes: 'We'll probably see more pushback following the pandemic because it makes distancing in use difficult now.'

## All about the hall

The Castleward housing-led regeneration on Derby's city fringe has around half its planned 1,000 homes in place and a primary school under construction, with this large-scale transformation being carried out under the guidance of Derby City Council, working with Homes England and the D2N2 Local Enterprise Partnership. Craig Taylor, associate director with the school's designer, Lungfish Architects, says of the project objectives: 'The client wanting the school to anchor the development with a structure that would be protective, give a sense of belonging and place, and be a landmark showing what the built environment could do for people.'

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NICK KANE (2)



Early in the regeneration, the school's location was changed from that originally identified in the Castleward masterplan. Its final site is a former car park, partly flanked by shop and restaurant backs, which was half the size of the initial location, having a developable area of just 5,200m<sup>2</sup>. Even so, the architect was able to design a one-and-a-half form entry school providing 315 places, instead of the single form 210-pupil school originally envisaged. 'We were able to add value by being on board early and working on the feasibility study to assist with the funding business case,' says Simon Reid, managing director with Lungfish. Arriving at the design involved detailed discussion with stakeholders as there was an expectation for a typical

**Below** At Ballymore's Mill Harbour scheme in London's Docklands, FCBS was brought in to design a three-form primary which is both part of the high street and fronts a pocket park. Here, context is everything.

rectilinear school building. 'We used multiple standard school designs to demonstrate that wouldn't fit on the site,' he adds.

The design, set for completion next summer, is a contextual response, inspired by Derby's heritage and specifically its Victorian railway housing. Unusually the school has its hall at its centre, rather than at one end, with circulation and classrooms wrapping around it. This move was key to saving space as it allowed classes to radiate efficiently from the centre and corridors to be minimised, producing an efficient plan that is estimated to have around 15% less circulation space than the norm.

'Putting the hall at the centre caused us great debate – the school has a deep square plan so movement was important, for example. This is effectively placemaking for multiple users from nursery children to staff on an extremely constrained school site,' says Reid. The three-storey hall's high level glazing floods the interior space with daylight, while carefully placed internal glazing extends that through to internal zones. The hall also provides stack ventilation. 'It is key to the building's design, both functionally and aesthetically,' says Taylor.

#### Cloisters, not corridors

Ask Simon Henley, principal of Henley Halebrown, about space constraints and his response is succinct: 'It's our job to make good buildings and also to make them economically viable.' The practice did this at Hackney New Primary School, in east London. The school was delivered by an innovative partnership including local landowner The Benyon Estate, developer Thornsett and ESFA's predecessor on an 8,180m<sup>2</sup> former fire station site, which was acquired on the open market. To make development work financially, the site had to accommodate 68 homes for affordable housing provider Dolphin Living alongside the school for user Hackney New Primary School Trust. 'It was a pragmatic, political set of circumstances to make a really good school,' says Henley.

The completed scheme, a successor to the practice's nearby secondary school, is a hybrid, with a courtyard school linked to an 11 storey, predominantly residential point block. Classrooms hug the courtyard, which has a cloistered gallery and covered stairs but no corridors. 'We ended up with a smaller building



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but more teaching space because we've taken out the corridors,' says Henley. In the process, the design provides four drama and music rooms – instead of the one requested by the trust – while also being rich in playful and practical features, including window seats and a rooftop garden.

The school's entrance sits between the tower and the school hall, the former providing shade and the latter fronted by a concrete bench where parents can sit. This recognises the school's social function within the community, says Henley. 'It's how the building engenders conversations. One of the most powerful things a building can do is provide social infrastructure.' The tower contains two floors of teaching and support space plus a retail unit, with nine floors of apartments above.

School deputy head Colette Harrington says the design works well, adding, 'The

external walkway, and wide classroom and office windows, enable visibility across the school. Children can foster independence while having the security that adults can oversee them from a number of points due to the cloister design.'

That's testament to the design's social sustainability. 'Architects don't really talk about behaviour, experience and the sustainable use of buildings,' says Henley. 'Sustainability is often seen in precise metrics, such as carbon content. The profession focusses on fabric and systems. But here we're going back to the essence: the shallow plan, dual aspect, naturally ventilated space around a courtyard.' That benefits a child from their first day at school, he continues, 'Everyone understands how they fit into the constellation of spaces. When a child arrives at the school, they can see their class and a sibling's class. Space is a really powerful tool.'

Although tight on space, it is possible that designs like these could teach more spacious, conventional schools a lesson when it comes to providing inspiring spaces for learning. That comes back to design's dependence on constraints, argues Henley. 'The moment there is no resistance, the architect's contribution is taken out and you end up with a building with a lot of circulation space and a fairly large surface area,' he says. 'For projects like this you have a more sophisticated dialogue.' ●