



LESSONS IN LEARNING

Three textbook schools

TEACHING BY EXAMPLE

With growing investment in schools, we look at three that illustrate trends such as diversity in teaching spaces and openness with security, and examine models for new schools in cities

By Barrie Evans

The rise in city-centre dwelling is often characterised as a phase in people's lives – for before or after children, or for those not wanting any. Having children means suburban living: that is what many of the new residential buildings say, at least in the private sector. But, of course, there are already a lot of families living in cities and it is quite likely that some of those newly moved-in will want to stay and the population of city children will grow.

Added to this, the building of city schools will grow with government commitments to school renewal. What will be the models for future city schools?

The multi-storey schools of the Victorian era came to be seen as inferior to the suburban model – a low-rise building in an island of outdoor space that has been imported to the city, though the island often shrinks under pressure for land. Even the first schemes (by others) for what eventually became BDP's exceptional Hampden Gurney school (AJ 17.10.02) were envisaged on the suburban model, and this just 500m from London's Oxford Street.

Play space on the school roof is not unprecedented, but Hampden Gurney's multi-storey playground decks, integrated with the other teaching spaces, created one new urban model.

Here we look at three new schools, each of which is impressive of its type. There

are two suburban schools – St Augustine's is a primary, Briar Hill a nursery – and by contrast the first school building featured, the Clavius building, is wholeheartedly of the city, located in central Glasgow. And before someone says there is no comparison because Elder & Cannon's Clavius building is for secondary students, it should be noted that it is part of St Aloysius College, for three to 18-year-olds, housed in a range of adjacent city-centre buildings, and that the same architect designed a similarly modern, urban, multi-storey building, housing 400, for the primary section in 1998.

The two suburban schools we feature stand in their own right, of course, and we will continue to build such schools, hopefully as well as these have been built. But it is also interesting to look at the similarities, whether much is lost and anything is gained in a city location.

While St Augustine's does have an exceptional site, the Clavius building has its own panoramas and more immediate outside contact: the buzz of the city. Light is brought into Clavius just as dramatically. Is the simple legibility of building layouts, which is more easily achieved with a single storey on an open site, a universal virtue? Can't spatial complexity be more interesting, for children, too? While suburban St Augustine's flexible class bases have two teaching zones outside the classroom – one in a broadened corridor,

the other on a balcony deck – this spatial logic would be the same four storeys up, in capacity. And in adopting a single open-plan volume, Briar Hill nursery is verging towards deep-plan space, despite an open site.

Even security concerns are merging. They are now as big an issue in the suburbs, though they are often dealt with in a more straightforward, practised way in the city.

One other element that needs to be in the picture of increased school building work – city or suburban – is the systematic study of how well such schools work. There is innovation with little feedback. Neither the increasing devolution of management to schools nor the Private Finance Initiative-packaging of contracts appear to be doing much for the growth of shared knowledge.

The Department for Education and Skills' programmes on classrooms and schools of the future have been unimpressive by this measure, as the buildings are often good in themselves, but too contingent on local circumstances and unresearched post-occupancy to contribute much to the broader good.

Hampden Gurney must be a candidate for further study, as should some of the old city schools, with their still-suggestive ideas such as galleried courts, gyms stacked two storeys high (they don't need to be suburban sheds in the playground) and much more. It is a potentially rich seam of precedent.

ST ALOYSIUS COLLEGE, CLAVIUS BUILDING



DAVID CHURCHILL

Left: the glazed north front, taking a lead from adjoining tenements. Right: the south side is stepped to allow views across the city

One added architectural dimension to Elder & Cannon's Clavius Building at St Aloysius College is the successful insertion of a Modernist building in the conservation-minded centre of Glasgow. It is not that surprising that when Clavius won the RIAS Best Building in Scotland award at the end of last year, this building, and indeed all three runners-up, were celebrated for their Modernist contributions – the awards were a festival for the McModerns. (What would be their tartan?) In the case of the Clavius, headlines focused on its formal qualities and urban presence (more than its being a school). All this is even less surprising when you learn that the awards jury chairman was Gordon Murray of gm+ad, architect of the radical SAS Radisson hotel on Glasgow's Argyle Street (AJ 5.6.03).

Clavius' main public facade runs along Hill Street to its north, so the architect was able to introduce unshaded full-height glazing that animates the classrooms and gives a real sense of being in the city – no Victorian-

school high sills here leaving only sky views. This facade is a continuation of a tenement and takes its massing and some of its detailed scale from the terrace. Cornice and floor lines broadly continue through, though the Clavius has equal floor heights and, since the site runs downhill, an extra, lower floor has been dug out to provide five levels. Within each floor the emphasis of Clavius' cladding framing is vertical – not sashes, of course, but an acknowledgement.

The east end, on Scott Street, the only other street facade on this corner site, is solid stone, with diagonal slashes of glazing. As the building moves down this street, it drops from five floors to two, around an enclosed courtyard, where it meets the Mackintosh School of Art's Bourdon building. The four upper floors also have views across the city to the south.

This building form is different from Elder & Cannon's 1998 primary school building for St Aloysius, which has its classrooms grouped around an enclosed central atrium,



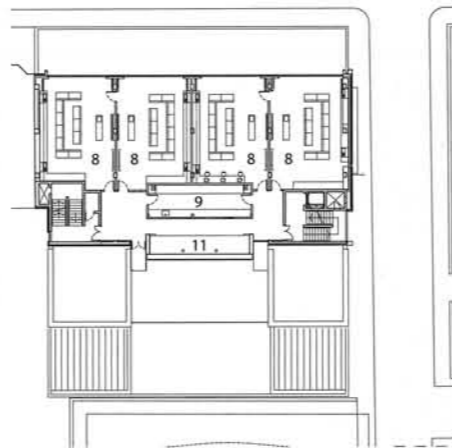
KEITH HUNTER

- KEY**
- 1 entrance
 - 2 reception/janitor
 - 3 forum
 - 4 headteacher's office
 - 5 IT room
 - 6 maths
 - 7 computing
 - 8 physics
 - 9 physics prep room
 - 10 first-floor study area
 - 11 seating area
 - 12 void

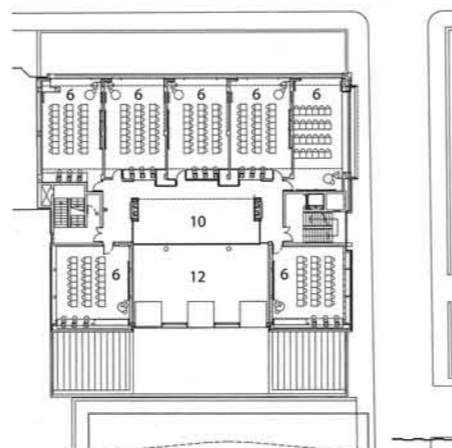


Below: in the Forum, with the garden beyond. Left: the first-floor study area above the Forum. Opposite: the south side

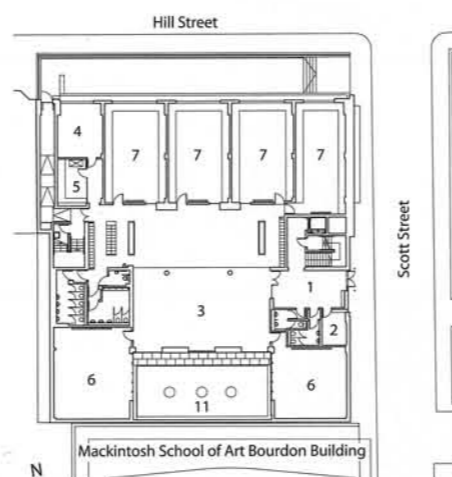
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typical floor plan



first-floor plan



ground-floor plan



like many an office. For Clavius, the southerly aspect is used to organise the plan. At every floor the run of classrooms along the north opens to circulation spaces facing south. On the lowest two floors this deepens into the two-storey Forum, opening onto the courtyard, with extra classrooms on either side.

This Forum is both an entrance lobby and a communal space, and was used for a team quiz challenge on the evening I was there. At its first floor is a balcony of circulation and study area, looking down to the Forum floor. This zone is repeated on the three upper floors, used for circulation and prep rooms, plus, variously, as sitting areas and a biology greenhouse on the second floor.

This planning reflects a standard classroom brief for the building, which houses maths, IT, biology, physics and chemistry; the room standardisation providing the main flexibility for future change. While the circulation areas are not large, the light

provides a sense of open ease. And both here on the south and in the classrooms with their northerly floor-to-ceiling-glazing, the sense of being in the city is strong, and the views are panoramic.

Security here varies from the primary schools. Protecting the site perimeter is simpler, achieved on a tight site by building along all the curtilage edge. Entry supervision is more demanding, with students moving between buildings during the day; it is more a matter of vigilance than design.

St Aloysius College, a Catholic school with students coming daily from as far as Stirling, is nevertheless wedded to its Glasgow-centre location. With a few variations, the college has been hereabouts for 140 years, in the city, at the scale of the city, with a bit of Glasgow toughness. As the college's director of finance Tom Ralph says, a suburban approach was not contemplated seriously, either as a relocation site or as a model for this building.

South-side
circulation, with city
views to the right



COST SUMMARY

	Cost per m ² (£)	Percentage of total
SUBSTRUCTURE	121.06	12.41
SUPERSTRUCTURE		
Frame	48.51	4.97
Upper floors	45.85	4.70
Roof	24.90	2.55
Rooflights	0.18	0.02
Staircases	1.78	0.18
External walls	88.12	9.04
Windows	88.18	9.04
External doors	1.07	0.11
Internal walls and partitions	15.26	1.56
Internal doors	23.23	2.38
Group element total	337.08	34.55
INTERNAL FINISHES		
Wall finishes	33.78	3.45
Floor finishes	34.32	3.52
Ceiling finishes	20.28	2.08
Group element total	88.38	9.06
FITTINGS AND FURNITURE		
Separate contract, costs not available		
SERVICES		
Sanitary appliances	4.76	0.49
Services equipment	22.76	2.33
Disposal installations	3.96	0.41
Water installations	84.86	8.70
Space heating, air treatment	70.30	7.21
Electrical services	74.20	7.60
Lift installations	10.43	1.07
Protective installations	7.60	0.78
Communication installation	4.65	0.47
Builders' work in connection	5.19	0.53
Group element total	288.71	29.59
EXTERNAL WORKS	18.23	1.86
PRELIMINARIES	120.93	12.39
INSURANCE	1.43	0.14
TOTAL	975.82	100.00

Cost data provided by Ross and Morton

CREDITS

TENDER DATE

November 2001

START ON SITE

April 2002

CONTRACT DURATION

65 weeks

GROSS INTERNAL FLOOR AREA

2,970m²

FORM OF CONTRACT

Scottish Building Contract, Contractor's Design
Portion with Quantities (January 2000 revision)

TOTAL COST

£2,898,249.60

CLIENT

St Aloysius College

ARCHITECT

Elder & Cannon

QUANTITY SURVEYOR

Ross and Morton

STRUCTURAL ENGINEER

Sidey Associates

SERVICES ENGINEER

Hawthorne Boyle Partnership

PLANNING SUPERVISOR

CBM Associates

MAIN CONTRACTOR

Melville Dundas

SUBCONTRACTORS AND SUPPLIERS

Curtain walling Technal, Solaglas, Systems Aluminium;
precast concrete cladding Plean Precast; roofing Talfab,
Graingers; vinyl flooring Bonar Flooring; stone flooring
Burlington Slate; lab furniture Assab; M&E NG Bailey;
ironmongery Jo Millars

WEBLINKS

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