



Brent Knoll School

**One-Year Review and Interview with Deputy Head
September 2017**



Architect Simon Innes of Innes Associates visits Brent Knoll a year after opening and discovers from Deputy Head Sarah Lynch how the building is working out. Innes Associates provided the design from inception to the submission of the planning application; the implementation was then carried out by a design and build team of Lakehouse with LSI Architects. The project was the last in Lewisham's *Building Schools for the Future* programme, one of the few local authorities to have completed all of their schemes.

Front Cover Image: Main entrance on Perry Rise



Main staircase overlooking the landscape

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When the Brent Knoll School in Lewisham for children with special needs moved in September 2016 from its old site, where it had been for 20 years, to a new building designed to a planning submission by Innes Associates it recorded a 75% drop in reportable incidents during the school day. The all-through School for students aged 5 to 18 on the autistic spectrum also achieved many, though not all, of its wished-for layout and design details in the new accommodation. Most of the reduction was in disturbances involving raised tensions in students and requiring calming interventions from staff; the sort that are not uncommon in schools for this group of children and are part of day-to-day life for teachers and assistants in special needs schools. This is such a remarkable change that it deserves exploration and explanation. I visited the school and carried out an interview with Sarah Lynch, the perceptive deputy head who considered carefully the effects of the physical environment on her children and was responsible for briefing the design team for the new building.

This article sets out how the design contributed in its layout and detail to improvements in the teaching and learning environment and records Sarah's intriguing analysis of the impact of buildings on children.

It also explains how designers can challenge some of the standard guidance of design for special needs schools and achieve a higher quality of environment, even in a time of limited resources.

Many of the children at the school are at the more severe end of the autistic spectrum; most join Brent Knoll in Reception class when they are four or five years' old. Before the process of learning can begin a lot of time has often to be spent establishing communication between the child and the teacher. "These children occupy whole worlds of anxiety we just cannot imagine," says Sarah. She tells the story of one boy who first came to Brent Knoll aged 5, dressed in the costume of a knight and unable to talk with his teachers. The boy was clearly anxious but would not, or could not, explain even the simplest of his needs and concerns. He would also become highly distressed if he had to be in the same room as other children for more than a short amount of time.

The teachers and teaching assistants at Brent Knoll, however, are practiced and patient in observing an individual's moods and idiosyncrasies and in a short time established a simple visual language to achieve an initial understanding.



Reception and Year 1 play area with water play

“You cannot overestimate the importance of the building to the student’s emotional regulation”

Gradually the child’s receptive and expressive language developed and over several years the school worked with him to increase his facility to learn. This year the boy is expected to pass 5 GCSE exams and Sarah expects that he will, after leaving School, live independently, hold down a job and find a partner. She also believes the new building had a fundamental role in bringing about this transformation because it created the calm conditions under which the child’s mind is sufficiently tranquil, and the child sufficiently free of anxiety, to allow receptive language and, following that, the learning to begin.

“You cannot overestimate the importance of the building to the student’s emotional regulation” Sarah says, emphatically. It is the internal layout of the building, the design of the classrooms and availability of support spaces that allow the teachers to manage each child’s activities and create the right state of mind for learning. For Brent Knoll this came down to four critical spaces being adjacent the typical classroom. Firstly, the Small Group Room is a small, simple space for two or three people in which the student and teacher or teaching assistant can spend time apart from the class, cooling off after a tense moment or pursuing their own activity for a while without disturbing others.

Secondly, the Soft Room is valuable, particularly for younger pupils, as a reward for good learning. It is a small room with large cushions and soft surfaces in which a child can safely let off steam. Thirdly, the Sensory Room provides sounds and images capable of calming and engaging a crowded mind, a form of electronic therapy. Lastly there is the outside: space and fresh air to let off steam and make a noise without disturbing others. If all these four spaces are close to the classroom and sufficiently available the task of managing the emotional state is made considerably easier and so too, as a consequence, is the task of teaching.

The proximity of these spaces to the classroom is partly for speed of use but is also about providing incentives to the children as a reward for good behaviour or learning. The opportunity to be physically active is very sought-after by many of them, particularly the younger ones, but any reward has to be immediate and is ineffective if delayed. This means the four spaces work better if they are not only nearby, but also visible. Teachers can then directly link the positive behaviour to an offer that can be fulfilled straight away. The plan of the school achieves all these adjacencies for Key Stages 1 and 2 and several, though not all, of them for Key Stages 3 and 4.



Immersion studio

[T]he building design puts as much importance on the notion of familiarity or “sameness” as on visual and audible calm...

The progressive reduction in facilities for intervention in the later stages is consistent with the need to prepare these students for the inevitable transition to a world after school that is less supportive.

Let us turn now from the layout of the school to the detail. Reducing visible disorder and audible distraction is a common theme amongst designers of these schools, but Sarah’s experience draws out a different emphasis to the one we are used to hearing. “We are not trying to create a laboratory,” she says, “and I wouldn’t want to sacrifice the experience of the real world for a perfect interior.” It is normal to try to reduce the visual fussiness of the interiors as many children on the autistic spectrum can be disturbed and distracted by complicated patterns or strong hues on walls, floors and ceilings. The interior design of Brent Knoll, however, uses strong colour to help the children locate the spaces that belong to them and understand the idea of progression in the school. The floors and furniture to Key Stages 1 and 2 on the ground floor are green, those for Key Stages 3 and 4 on the first floor are blue. Children are told the green is like grass, the blue like sky. “A bit cheesy” admits Sarah, “but the idea is both clear and useful to the children”.

It is often when children move around the school that tensions can arise and the choice of colours helps reduce tension by making navigation between spaces easier.

The same philosophy in the detailed design has been applied to the design of acoustics. Sarah does not deny the benefits of a calm environment but says her students are not disturbed by the presence of background noise such as a road, provided it has the character of consistency and is more or less the same each day. Noise from plant such as fans or pumps is tolerable when at a low level and constant (for example the fans in a ventilation unit), but intolerable when intermittent and unexpected (the example given was the controls from an audio visual unit). The normal rules for designers are therefore worth challenging: it is not just the quantity of noises that matters, but their quality and meaning in the everyday world.

Following this line of thought, the building design puts as much importance on the notion of familiarity or “sameness” as on visual and audible calm, particularly for the earlier stages of learning. The younger children find it very difficult if the environment changes from one day to the next.



Key Stage 1 classroom

Brent Knoll's Deputy Head ... does not set limits on what her children are capable of becoming

For the secondary-age children there is a different emphasis on preparation for adult life. The School were assiduous in their selection of furniture in an effort to respond to both stages of development. Details such as the opening mechanisms for the lockers (simplest push buttons for the youngest, turn-knob for the more motor-skilled middle years and key-lock for those in Years 12 and 13), and the introduction of the greatest variety of colour and texture in the reception area to provide a sample of adult life are all intended to help the child progress.

In summary the design qualities held by the project, and the benefits they have for education, have derived from a detailed consideration by the School and design team of the needs of this particular group of children and an imaginative interpretation of the normal guidance. The project has tried to create an environment that is supportive but not protective, one that is tranquil but not featureless and one that prompts progression for all children; this project is, in short, bold in its aims and ambitious in its expectations for these students in a way that challenges some of the guidance often given to designers. In doing this the team has listened carefully to Brent Knoll's Deputy Head, who (I think it fair to say) does not set limits on what her children are capable of becoming.

Project Information

Client

London Borough of Lewisham

RIBA Stage 2 Design and Planning Application

Innes Associates [with HKR]

RIBA Stage 3 - 5 Design

LSI Architects

Contractor

Lakehouse

Construction Cost

Approximately £6 million

Completion

September 2016 [main build] 2017 [Reception]

If you would like to discuss any aspect of your project please call Simon Innes on 020 7928 6734 or visit our website www.innesassociates.net.

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