

# A & B

**IN CONVERSATION**

Mario Botta, Mario Botta Architetto

**ARCHITECTURE**

Delhi Public School, Bengaluru: Khosla Associates  
Lateral House, Bengaluru: Gaurav Roy Choudhury Architects

**HERITAGE**

Adaptive Reuse of Jal Mahal Bijolai, Jodhpur: Grup ISM Pvt Ltd

**CAMPAIGN: Architectural Education**

Women Students, Culture and Pedagogy: Madhavi Desai

**DELHI DIALOGUES**

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# ARCHITECTURE AS PEDAGOGY

In a minimalist, yet intricately moulded organisation of spaces, Delhi Public School, Bengaluru by Khosla Associates is a testament to how an honest, contextual design of spaces can inspire a way of learning far more effectively and naturally than any conscious method of instruction.

*Text: Chandrima Padmanabhan  
Drawings: courtesy Khosla Associates  
Images: courtesy Shamanth Patil J*







The 8ft wide single-loaded corridor with adjoining classes all around, effortlessly accommodates students, while offering an unobstructed view of the courtyard, drawing them into those spaces.

Educational institutions, more often than not, are planned to be strictly functional and cost-effective, with little thought given to the intangible intricacy of crafting an ambience that could encourage the environment of co-learning, heartening the quality of education in its turn. Students engage with the built environment, of enforced order of structured plans which school environments impose, more frequently and meaningfully than they do with calculus or organic chemistry. Yet the design of these places, meant to harbour an understanding of values beyond plain intellect, are themselves edifices of sole technical efficiency drawing the mind no further than the walls that enclose it. Perhaps we have lost sight of what education really constitutes of, which is to define our identity, drawing a relevant dialogue in an amassing context of tangency. Just as we relate to something as expansive as the concept of the solar system in its significance to our way of life, we similarly engage with our environment as interrelated pieces of a jigsaw that give meaning to the whole. And like the people we live, work and play with, the buildings that we live, work and play in everyday should ideally also form an important part of the narrative of our life. The Delhi Public School (DPS) in Bengaluru evokes just this feeling of continuity in an environment that otherwise constantly confines and isolates.

As a franchise for the Delhi Public School chain of institutions, the design brief of the DPS, Bengaluru required architects Sandeep Khosla and Amaresh Anand to conceive a modest and

efficient modular design that could be replicated across several schools in South India, with minor amendments allowed for differing site conditions. As an ongoing construction that is to happen in stages, the present kindergarten facility of 35,000sqft that has been constructed has 25 classrooms, meant to house 40 children each, with the overall master plan, which encompasses a junior, middle and senior school block eventually catering to 4000 children. Further restricted by a time constraint of six months and a cost of ₹1200 per sqft, the building could have typically resulted in a dreary assemblage rightly associated with weary hours, meagre air and light, and a cramped infancy we have come to accept as the unquestioned norm of institutions. Though architecture is often wrongly dumbed down to a question of appearances, the DPS goes much further than just infiltrating an alternate and 'pretty' picture of schools that are different from the usual repositories of efficient square footage that accommodate ideological movement patterns. Each element that informs the Kindergarten, from the terracotta 'jaali' with its consequent play of light to the coloured corridors around the courtyard, goes beyond its aesthetic construct to root the structure in its context and account for its moral and social aspirations as an institution.

The Kindergarten's single-loaded, 8ft wide corridor that opens out into the central courtyard does what every long, double loaded labyrinth-like corridor is incapable of – the fostering of



The courtyard space is the soul of the design encouraging the use of the outdoor as a secondary learning and interacting milieu.





↑ The large courtyard running the length of the building is delineated into two smaller, relatable courts, by an imposing stairway that runs across the space.

a stimulating and responsive learning space that is not zoned, blurring the dichotomy between spaces for learning and transit. There is a seamless sense of movement from the classrooms to the steps of the corridor and to the courtyard that draws a student to move through them, learn, linger and dream. The central, linear courtyard runs the entire length of the building, delineating into two smaller courts by a grand, intersecting stairway. The stairway itself, in the centre, transforms into another space to linger in, celebrating the transition from one floor to another, without being relegated to a dingy corner, lost in its utility. These spaces, with unobstructed views onto them from the classrooms, motivate an intrinsic desire, even in the most passive observer, to linger in them beyond timetabled classes. Countering the depressing trend of standardised school design, of classrooms full of students who would rather be elsewhere, the DPS creates spaces for the evolution of the concept of outdoor learning, on benches surrounding the frangipani trees in the courtyard or on the steps of the corridors. Subtly enforcing the Jane Jacob's concept of 'eyes on the street', the constant visual continuity into these spaces, from the surrounding classrooms allow teachers and students to casually observe them, keeping everyone honest and accountable, discouraging petty transgressions such as bullying, and encouraging positive relationships.

The classrooms surrounding the courtyard, punctured articulately in-between with communal breakout spaces to counter the order,



↑ All activities revolve in and around the courtyard by virtue of its constant visual presence.

are 700sqft (35ft x 20ft) and can easily be replicated horizontally or vertically atop one another, as the need arises; flexible enough to provide for the current and evolving way of teaching. Even through a simplistic enough design, the resultant spaces are a delightful combination of well-detailed and thoughtfully crafted materials that consciously manoeuvre the wind and light streaming into the place, illuminating the unadorned canvasses of exposed concrete and terracotta. The perforated terracotta screens on either side of the classrooms and across stretches of the building, go beyond its direct contextual reference to 'jaalis', exploiting the temperate climate of Bengaluru which breezes across the space and allows the students to relate to the environment outside, instead of being cocooned in the detached, air-conditioned, artificially-lit spaces reminiscent of the present-day mall culture. This continuity with the outside environment allows its users a lesson in the local climate; in a light that varies in pattern through the course of the day and the handcrafted workmanship of the

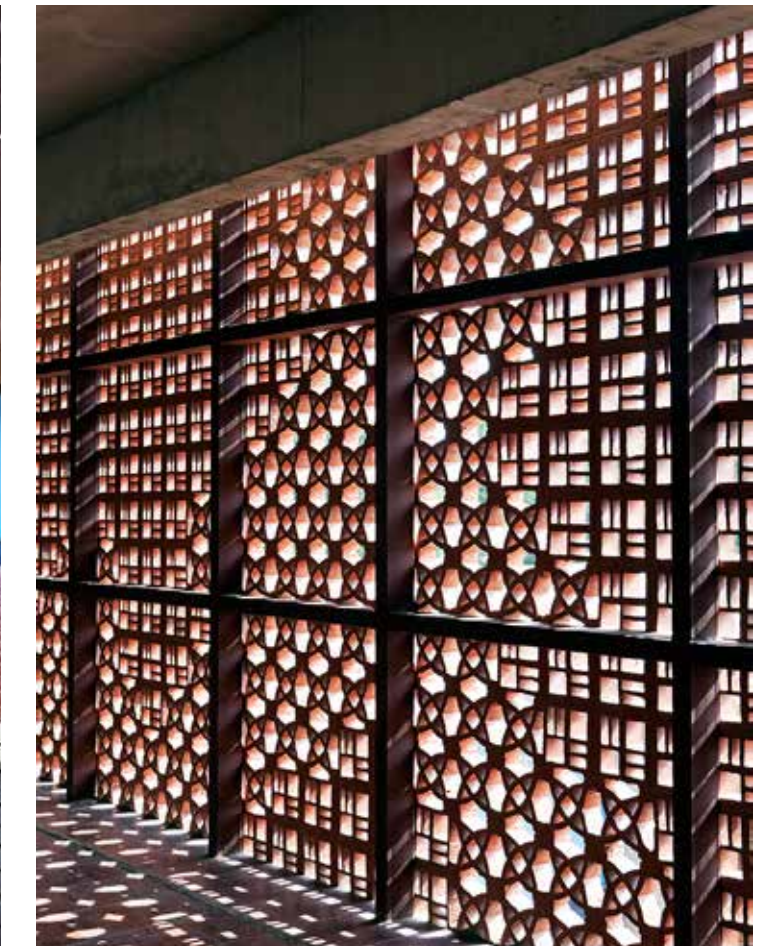
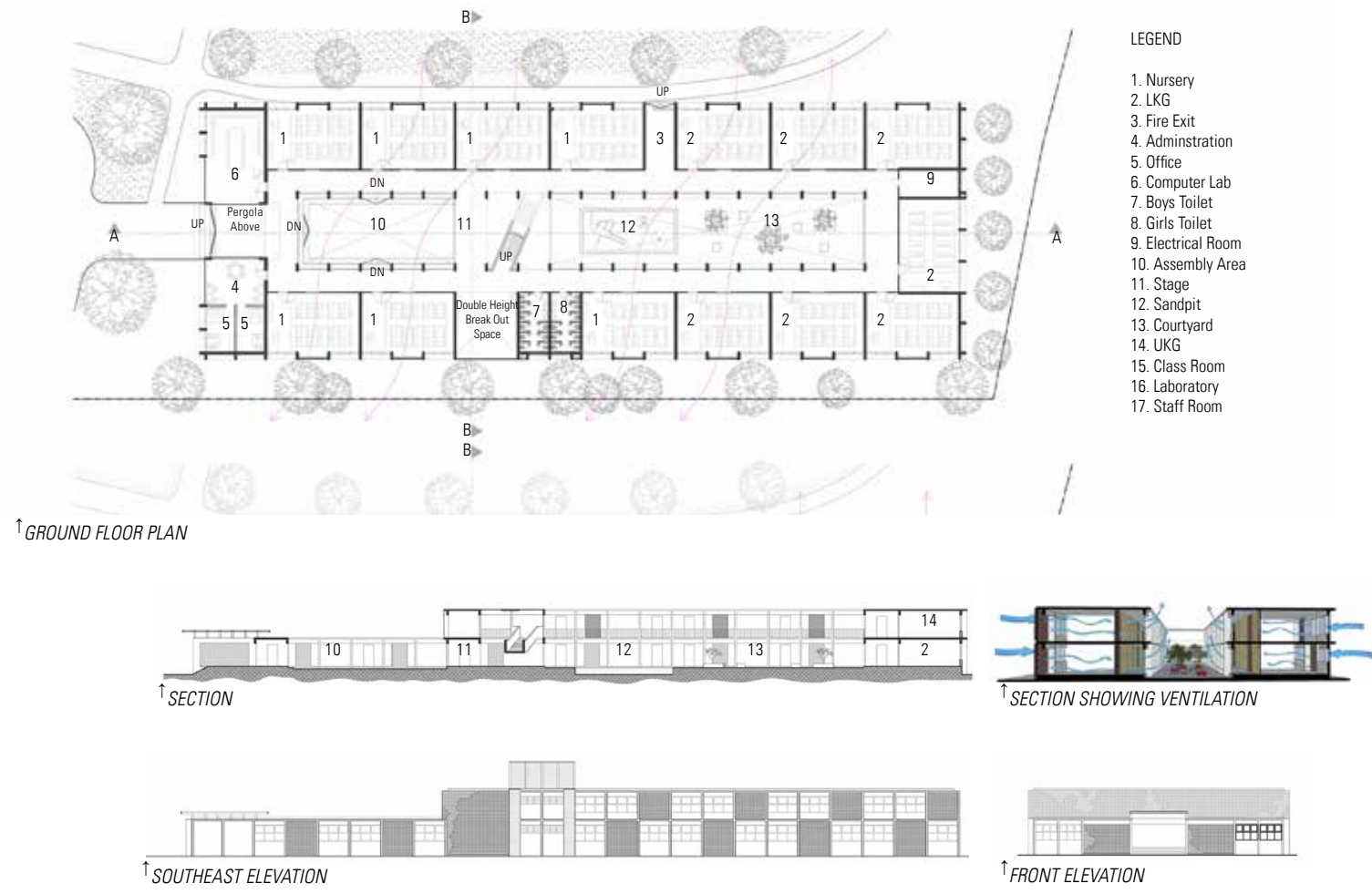
'jaali' itself, all of which engage the senses in a more realistic narrative of the place it resides in.

The adjoining red-oxide flooring of the corridor, traditionally found in Chettinad Houses and typical of old South Indian households, is an attempt at reviving a dying art. This handmade oxide floor requires the least manufacturing, generates almost no waste and demands minimal transport of raw material; sustainable in every way, only to be usually replaced by sleeker, fancy mosaics and ceramics, a sentiment reverently not indulged in, in the design of the DPS. The coloured, corrugated metal sheets on the walls of the corridor also facilitate the speed of construction and capably weather the rigour of use, which a school corridor is subjected to. The use of bright colours add a dash of whimsy to the spaces; colours that children are naturally drawn to, that adorn their pictures and are associated with an instinctive sense of imagination and happiness that counter the sepia of dull,



↑ The staircase itself, relegated at the centre and through its expansiveness, creates another place to linger in.





↑ The combination of the two different patterns of 'jaali' creates interesting designs on the building at different times of the day.

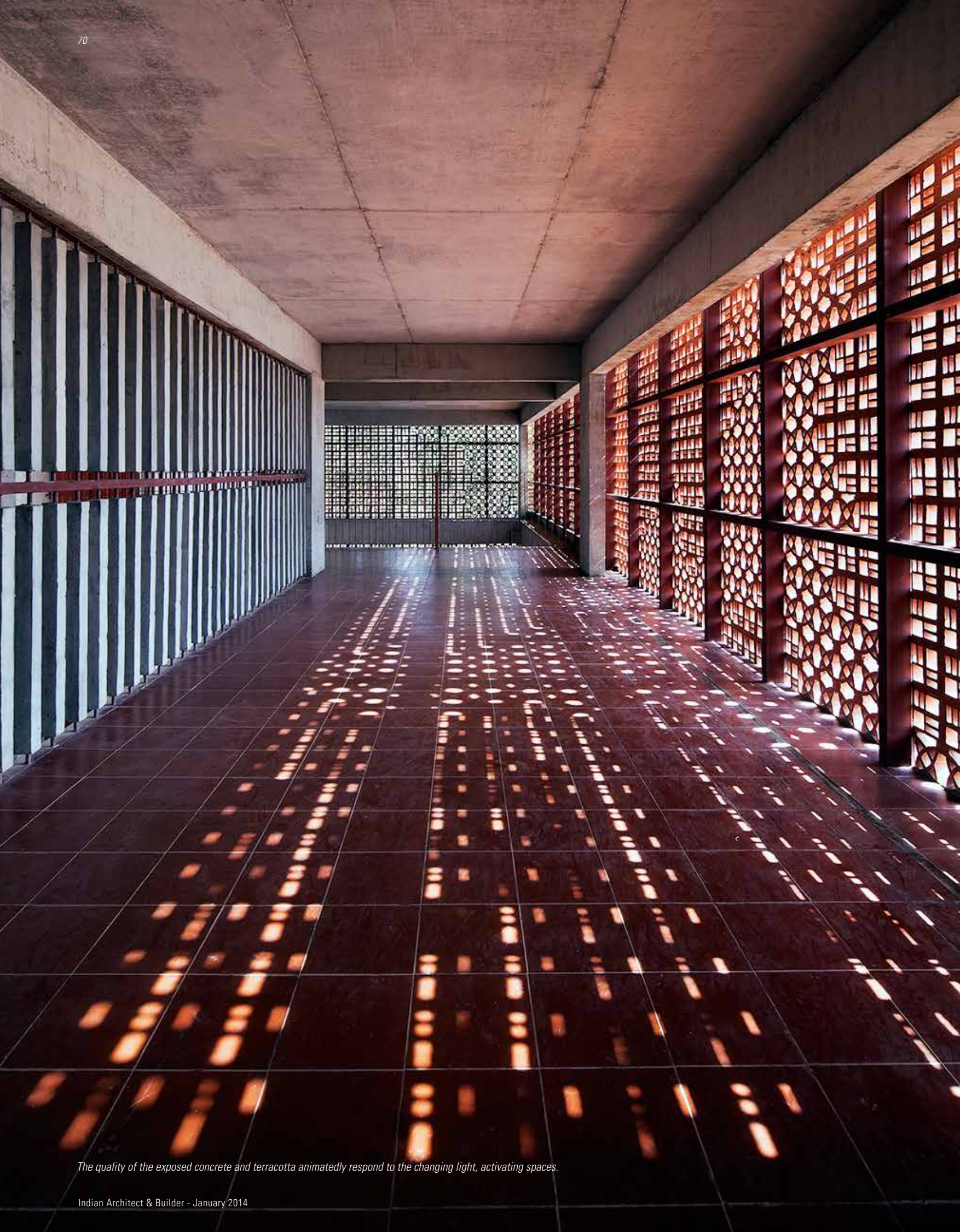


↑ The classrooms make proficient use of the 'jaali' which is naturally ventilating and lighting the space, to create a comfortable and lively setting for learning.



↑ The break-out spaces open out subsequently more than the classrooms, as a space for group work and play.





The quality of the exposed concrete and terracotta animatedly respond to the changing light, activating spaces.

sterile hallways. The interspersed series of horizontal and vertical pergolas animate the contiguous spaces with interesting patterns at different times of the day, visually arresting in their simplicity and providing a natural environment that is easy and pleasurable to work in.

The design of spaces prescribe a way of life, as they form a sequential experience from one setting to another, a responsibility that cannot be taken lackadaisically. It is unfortunate that children are first introduced to the spirit of learning, in the unlovely garb of an institution. In places where instruction looks unfriendly and cold, they unsurprisingly draw mean associations to the ugly confinements of education and the detached life it accustoms one to. What is education meant to bequeath, if not a sense of place, a set of values imbibed naturally? An important tenet of Montessori education is the encouragement of exploration and discovery, the freedom of movement that does not limit the place of study, and a process of learning through the senses and through perception. Most of these ideals can come naturally when the schools themselves are evocations of such environments. The design of space in the Kindergarten, by virtue of its composition, materiality, system of geometry and colour is no monument to a static institution of detachment, but a living manifestation of a responsive understanding of place and space which teaches and tells a story through its very fabric. A modest response to the requirements of a stringent brief, the richness of the design comes through in its performative method of engagement, which draws students to utilise its spaces just as street theatre draws the masses; the play here being orchestrated by the quality of the space itself. ■

#### FACT FILE:

Architects	: Khosla Associates
Principal Designers	: Sandeep Khosla and Amaresh Anand
Design Team	: Sandeep Khosla, Amaresh Anand, and Bijeta Bachaspati
Structural Engineers	: S&S Associates
Civil Contractors	: Gomini Constructions Pvt Ltd
Project Management	: Kris Cooper Pvt Ltd
Landscape	: Garden World Pvt Ltd
Completion of Project	: 31 <sup>st</sup> May 2013



The coloured, corrugated metal sheets of the corridor walls allow children a measure of playfulness with pattern and colour.



The ordered play of pattern and functionality makes a vibrant environment, fostering a joy in learning and working.