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# Classrooms during the times of Covid-19: Use outdoor spaces smartly to decongest

By March 5, a few months after the coronavirus epidemic broke out in China's Wuhan district, 27 out of 28 states in India and five out of the eight union territories had announced that all schools would remain shut until further notice. Stay home and study, children were told even as many teaching models were tried: home schooling programmes, free online resources, public television and radio broadcasting channels and online sessions. Not everyone could attend, of course: many students don't own laptops or have good internet bandwith, to start with. Needless to say, the pandemic has transformed the centuries-old chalk–talk teaching model to one driven by technology.

This disruption in the delivery of education is now pushing policymakers to figure out how to drive engagement. Hence a multipronged strategy is necessary to overcome the challenges of navigation, physical distancing, and sanitation in order to build a resilient Indian education system in the long term.

So what will the new classroom, and by extension, the school, look like?

A design that encourages indoor and outdoor connect can easily be reconfigured to address the concerns raised by the pandemic. Our model is based on the British School, New Delhi, which has five-star rating in the Green Rating for Integrated Habitat Assessment, due to its flexible learning environment provided by the building design.

Our first principle is to disperse crowds and manage flow of movement. To that end, we've distributed the entry across three gates thereby reducing traffic to 33%. Each entry point is equipped with sanitation chambers accommodating ultraviolet baggage scanner and sanitation mats. Student movement is channelled by designating a separate staircase for each entry floor.
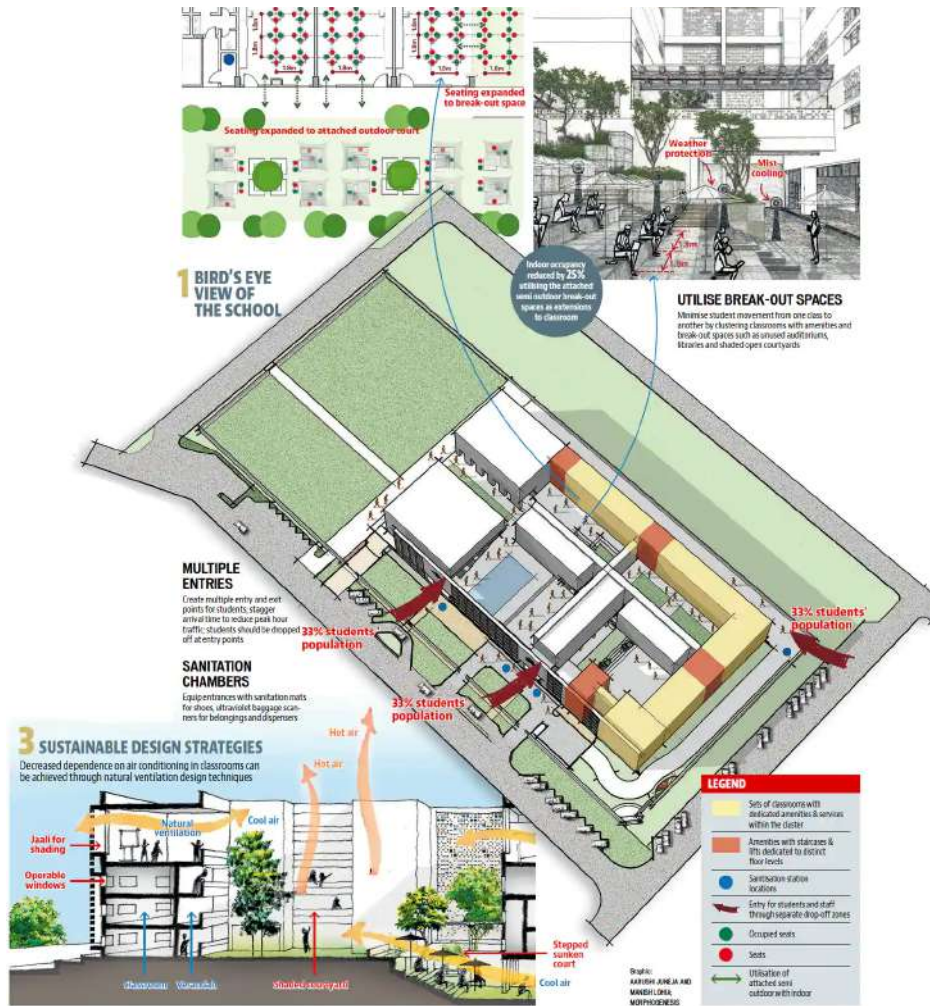
The break-out space near a classroom – any space that can be converted to suit our needs using furniture or other design products – is perfect for reconfiguration. In our re-imagining of the classroom, we've made good use of an outdoor court for this purpose. This cuts the density of children indoors and evens the spread across the break-out space.

Each year group is assigned four to six classrooms with an attached break-out space. A shaded courtyard can also be used as a break-out space for the extendable classrooms. The various clusters [or sections] can use them at different points in time during the day. The indoor classroom itself is reconfigured keeping social distancing norms of at least 1.8m between students. Transparent shields can be employed to reinforce the distancing.

Semi-covered areas in outdoor spaces can easily be converted to classrooms, but the real advantage of such a space can only be experienced in outdoor courtyards designed for maximum shade, given our weather conditions. Adaptive strategies such as temporary shading devices and mist cooling fans would also enhance student comfort.

Sanitation pods (with an automated sanitiser dispenser and a personal protective gear vending machine, which provides gloves, masks on need) have been placed strategically. Think of this as the new water-cooler, which allows social distancing and at the same time doesn't do away with spaces of interaction.

A school that incorporates sustainable design elements like self-shaded internal courts, baolis (well-shaped seating with steps), sun shading strategies and verandas help connect students with nature. The provision of operable windows with sun shading encourages natural ventilation through the classroom. In a post-pandemic classroom, a decreased dependence on air conditioning is desirable and natural ventilation design techniques will help achieve this.

Rethinking schools post pandemic is a subject that requires a multifaceted approach, because practical experience is vital.

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