



aerial view looking east

## Nanshan Foreign Language School, Shenzhen, China

The Nanshan Foreign Language School (NFLS) is a 54,000 m<sup>2</sup> elementary and middle school campus that includes: regular and special classrooms, a library, a gymnasium, an indoor swimming pool, an auditorium, and a faculty dormitory, along with dining halls and dedicated playgrounds. Located in the Nanshan district of Shenzhen, the NFLS campus represents the final piece of a decade-long redevelopment process that saw a condensed urban village transformed into a contemporary vertical city. Surrounded by high-density residential development and commercial towers, the main challenge for the project was to regenerate an urban condition broken by contemporary development.

### Strategy I: Horizontal vs. Vertical

Connecting to nature encourages creativity and promotes new modes of thinking. One of our main objectives for the project was to create an intimate environment for teaching that would connect students to the natural world beyond the site. The dense verticality of the neighborhood surrounding the site made this objective even more pressing—the desire to create opportunities for students and teachers to interact with nature a driving force behind the design, leading the design team to create a horizontal, low-density school.



overlook at school courtyard





view of school between two residential towers

The NFLS campus is conceived as a sweeping horizontal garden that contrasts the dense, vertical urban environment it serves. The school intentionally breaks the distinction between building and open space to create a linear hybrid that includes closed spaces, semi-enclosed zones, and open green spaces. This low-rise composition allows the school to create an open oasis within a densely packed residential community that allows students to move seamlessly between indoors and outdoors. This allows the school to create vibrant campus life and re-establish a connection to nature within the site.

The project site has a natural slope. The southeast corner is low and slopes upwards to northwest. Link-Arc's design works within the existing topography. Larger program volumes (gymnasium, pools, dining halls, and the auditorium) are nestled into the slope. These volumes create terraced platforms above which form a new ground plane dedicated to teaching spaces and play areas. This allows the teaching spaces to be arranged in a linear manner without the need to develop the building vertically.



view from terrace with towers in the background





view of school courtyard

## Strategy II: Interweaving the Garden

The linear nature of the teaching volumes creates many architectural possibilities. These volumes meander across the site, splitting seamlessly to create six unique courtyards, which serve as semi-private enclaves for teaching and play. Each courtyard has a unique title: Entry Courtyard, Gathering Courtyard, Elementary School Courtyard, Middle School Courtyard, Sports Courtyard, and the Recreation Courtyard. Each open space is designed with a spatial theme and architectural strategy appropriate to its intended use. The continuous ceiling above the ground floor is painted orange, unifying the campus open spaces and creating a sheltered public zone that allows access to every space in the project and responds to Shenzhen's rainy climate.

In order to further connect the educational spaces to the outdoors, the linear classroom bars are staggered in section. This creates exterior terraces that serve as the main circulation corridors and also ensures that all the teaching spaces have access to sunlight and views. The sinuous motion of the classroom ribbons generates a series of interconnected outdoor spaces that are tailored to meet the needs of each teaching area. The elongated courtyards of the specialized school and middle school turn into enclosed and protected courtyards for the primary school and library, or conversely, open into vast grounds used for physical activities.



view of classrooms from courtyard



### Strategy III: Thin Section/ Ecological Innovation

The NFLS project intentionally breaks with conventional school design principles which divide a site into buildings and functional zones in favor of a sectional organization that maximizes access to light and views for each classroom. This strategy allows for multiple sectional variations and creates diverse spatial conditions for recreation, interaction, and education.

Link-Arc conducted many design studies to optimize the building's response to Shenzhen's warm, humid climate. The staggered organization of the classroom bars allows each room to have access to light, while the single-loaded classroom layout promotes natural ventilation. The building's façade treatment also serves to maximize the building's climactic response. The northern facades are defined by high-performance glass and operable windows. Facades facing east feature architectural shading devices that minimize solar heat gain. Areas facing south and west incorporate shading elements and perforated aluminum screens to mitigate the effects of the harsh southern light.

In order to minimize stormwater runoff, the building's public spaces are paved with permeable bricks while the roofs are planted with sedum (this has the additional effect of minimizing heat gain on the roof). Solar panels on the roof profile up to 2000 MWh of clean energy yearly. Thanks to these design and technological strategies, the NFLS project was the first compulsory school project in Southern China certificated GBEL Three Star Label.

Please contact [press@link-arc.com](mailto:press@link-arc.com) for high resolution images.



detail showing perforated panels



aerial view at dusk



## About Studio Link-Arc

Based in New York City, Studio Link-Arc, LLC is an international team of architects and designers. Our name, Link-Arc, refers to the practice's collaborative nature as well as the company's mission, which is to work across disciplines to create strategy and design in the fields of urban planning, architecture, spatial art and landscape. We accomplish this by linking knowledge, resources, and intelligence, from multiple perspectives and diverse backgrounds.

Since its founding in 2012, Studio Link-Arc has completed many high-profile institutional and cultural projects around the world, including: the China Pavilion for Expo Milano 2015, the China Resources Archive Library in Shenzhen, and the Shenzhen Nanshan Foreign Language School, a 52-000 square meter educational commission. The office is currently engaged in an 80,000 square-meter cultural center and master plan, a 2,000 square-meter private gallery commission, and multiple institutional projects.

The office has been published extensively, has received many awards for its work, and was included in Architectural Record's Design Vanguard 2015. The China Pavilion for Expo Milano 2015 received many awards including: the 2015 Bronze Award for Architecture from the Bureau International des Expositions, the 2015 Class Expo Pavilion Heritage Award from Class Editori magazine; the 2016 American Architecture Prize (Gold Prize Winner); the German Design Award Special Mention 2015, and was shortlisted for 2016 Culture Building of the year by the World Architecture Festival. Studio Link-Arc also received many awards for the Shenzhen Bay Gallery, including: the 2017 Architizer A+ Popular Choice Award; the 2016 Iconic Award from the German Design Council; and was one of ten architects '2015 Design Vanguard' winners selected by 'Architectural Record'.

### NSFL School Project Facts

**Project Duration:** 2014-2018

**Area:** 54,200 sqm

**Client:** China Resources Land, Ltd

**Architectural Design Lead:** Yichen Lu, Razvan Voroneanu

**Interior Design Lead:** Yichen Lu

**Chief Architect:** Chunqi Fang, Wen Zhu

**Project Team:** Kenneth Namkung, Hyunjoo Lee, Dongyul Kim, Hyungsun Choi, Yihong Deng, Viviana Wang, Mariarosa Doardo, Jialin Yuan, Yoko Fujita, Simeng Qin, Shiqi Li, Wenyun Qian, Xinhui Wen

**Architect of Record/Stucture/MEP:** Architectural Design & Research Institute of Guangdong Province

**Interior Construction Document:** Ruihe Decoration

**Landscape Architect of Record:** Shenzhen Landscape

**Structural Consultant:** Yoshinori Nito Engineering & Design PC

**Curtain Wall Consultant:** EFC Engineering

**Lighting Consultant:** Ning Field Lighting Design

**Green Building Consultant:** Shenzhen Institute of Building Research

