



PEB Exchange, Programme on Educational Building 1999/06

An Innovative School in Torcy, France

OECD

<https://dx.doi.org/10.1787/462174374310>

AN INNOVATIVE SCHOOL IN TORCY, FRANCE

The Torcy Junior High School is located on the outskirts of the new town of Marne la Vallée in the Paris suburbs, between a motorway and a stretch of ordinary countryside on a site overlooking a small lake. The school has a capacity of 400 pupils and a surface area of 4 457 m². It was designed by *Avant-Travaux* and was completed in 1997. Special attention was paid to its geographic setting and to the various aspects of its environment, from its integration into the surrounding landscape to the design of its interior space. This awareness of the school's environment is matched by the high quality of the construction and careful attention to details.

An original architectural approach

The school is located in an evolving, partly urban, partly rural area in which contradictory elements abound. It responds to this setting by combining two conflicting styles, characteristic of the city and the countryside respectively. By juxtaposing these styles, the architecture stresses contrasts and plays on differences.

The building's design combines two quite distinct elements, a concrete base and a rectangular structure which appears to have been suspended over it. The base follows the contour of the ground, its sunken oval patio seeming almost to be a natural feature of the landscape. It resembles a cavern, an undulating space with a rough and irregular texture, the walls of which are unified by the same veined patterns in the concrete. Those entering the building see it as an open area that leads to all the school's activities.

On top of this concrete base, the architects have placed a rectangular structure, the sophistication and beauty of which derive from the materials chosen. The façade's lacquered steel walls, which contain copper and cobalt pigments, change colour in the shifting light, from indigo to mauve pink to a reddish-brown burnt sienna. The colours shimmer, and the glittering steel structure seems to be in perpetual movement whether it is seen in bright sunlight, in shadow, or lit from behind. It is a luxurious decoration that adds beauty to a simple form.

The school grounds and the landscape

The conception of the school grounds played a key role in the design of the project as a whole. The project originally included an orchard, but it was ultimately



Torcy Junior High School



not planted because of disagreements among the various local authorities. The ground floor seems to form part of the land itself, with its veined concrete walls that resemble strata in the earth. The patio slopes naturally downwards to the courtyard.

The classrooms are located in the upper part of the building. They are painted white and have been given as many windows as possible. Although the classrooms are quiet when the windows are closed, it can be very noisy when the wind is blowing from a certain direction because of the proximity of the motorway, which was an unavoidable planning constraint.

All the openings in the façade at ground floor level were carefully designed so that they would afford views of the countryside. The architects also gave special thought to recreational areas by designing a number of areas with no specific function. These are "free" areas, such as outdoor terraces, the patio and circulation routes in the upper part of the building, that pupils and staff members can occupy and use as they wish.

Space and light inside the building

There are no corridors in the building, which is brightly lit with natural light. Large picture windows and ceilings twice the normal height give circulation areas a spaciousness that is unusual for a school building. Windows are strategically placed so as to take full advantage of views of the countryside, woods and ponds. The circulation areas, which are much like galleries, are lit from above

or receive light from the central oval courtyard. For example, the documentation and information centre is located above the main entrance to the playground and opens onto the countryside through large windows shaded by metal sunscreens.

Conclusion: the cavern and the lorry

This dualistic project is based on a series of contrasts: earth, mineral, organic, heavy and opaque, on the one hand, and sky, metallic, technological, light and transparent on the other. It combines two environments, the town and the country, each represented by two elements that join and reconcile them, even though, suspended one above the other, they have little or nothing in common. The result is a harmony based on the contrast between the motorway and the rolling countryside, in which the upper part of the building is like a vehicle that has left the motorway and is in suspended motion over the cavern of the building's base.

The school is a most unusual structure but one which is integrated into its surroundings, between town and country and the motorway, and which tries to reconcile the aesthetics of clean lines, movement and tension with the more peaceful beauty of the landscape and its contours.

EDUCATIONAL FACILITIES IN KOREA

A programme is currently underway in Korea to modernise school buildings and equipment in order to better meet today's teaching needs. During the 1970s and 80s the Korean Government reformed its educational system, making fundamental changes in teaching methods, class time and curricula with a move toward open education in elementary schools and an individualised interactive learning approach in middle and high schools. In 1993, the Korean Institute of Educational Facilities was created to study building designs and equipment, such as computers, which would be suited for the new curricula. Composed of civil servants and experts in education and architecture, the Institute publishes its findings four times a year.

Most school facilities at the primary and secondary levels are not yet adapted to the reformed curricula and lack adequate conditions for a variety of teaching methods, but local authorities have made step-by-step plans to renovate their facilities.

A significant number of schools have introduced the concept of "open education" and every provincial authority is responsible for producing a model for open education. As new teaching programmes involve both individual and group work to respect differing ways of learning, school authorities are opting for classrooms with individual work tables that can be arranged for group discussion. The need remains for multi-purpose spaces, including learning resource centres with a library and video room. One example of flexibility common in Korean schools is classrooms which are open to the corridors, so the latter can be used for teaching if required.

Educational system

Korea's educational system is structured as follows:

- elementary school – compulsory: 6 years, for ages 6-11;
- middle school: 3 years, for ages 12-14;
- high school (general or vocational): 3 years, for ages 15-17;
- college/university: two-year junior college or four-year college/university.

After completing compulsory primary education, nearly all young people continue on to middle school. Students must pass an entrance examination to enter high school, and approximately 90 per cent are successful. High schools are generally divided into two categories, general or vocational schools.

Private institutions make up 35 per cent of secondary schools and 83 per cent of post-secondary institutions. State-owned facilities most often offer more space per student than private ones, and the Government recently laid out plans to expand non-curricular facilities such as dormitories and student cultural centres.

At the level of higher education, in addition to colleges, institutions called "open universities" provide instruction to the adult community and employed youth.

Numbers of Schools and Students in Korea; Available Space

	Elementary schools	Middle schools	High schools	Higher education institutions
Number of schools/institutions	5 721	2 720	1 892	316
Number of students	3 783 000	2 180 000	2 336 000	2 112 000
Floor area per student	5.2 m ²	5.0 m ²	5.9 m ²	9.9 m ²
Site area per student	9.5 m ²	7.5 m ²	12.3 m ²	42.7 m ²

Source: *Statistical Year Book of Education 1997*, Ministry of Education, Korea.