[JoongAng Ilbo – home&] A university campus? No, it's an international school to debut in Incheon

Tip: How does an international school differ from a foreign school?

Chadwick International, which will open this fall, is an international school. To be more precise, it is a foreign educational institution, which differs from a foreign school. Unlike an international school, which will debut for the first time in the nation, there are some 20 foreign schools in Seoul alone. As for admission, an international school can accept local students up to 30% of its quota while a foreign school can only admit locals who have lived overseas for over three years. Also, a local school corporation is eligible to set up a foreign school while an international school is only established by a foreign education school corporation.

A reporter visited Chadwick International, with a couple of experts specializing school architecture.

A prestigious foreign private institution has finally arrived in Korea. And that is Chadwick International in Songdo International City that has been established, in accordance with "The Special Laws on Establishment and Operations of Foreign Educational Institution."

Its annual tuition fees reach more than KRW 30 million, and its unique building structure and design seems to be a grand preview of what to be offered. "The school has been designed to facilitate our primary education goal through the state-of-art facility features and carefully-customized classrooms for kids," R. Warmington, President and CEO of Chadwick International, said.

Most prestigious private education institutions stress that education starts from the very stage, at which a school building is designed, not from the school curriculum. Chadwick International's architectural structure proves such point that its main focus is to help learners be involved in discussion- and presentation-based programs, and above all, find themselves happy while at the school. In order to see how Chadwick International is different from majority of local schools, which are designed and built under the standard guidelines, in terms of architectural structure and supplementary facilities, [JoongAng Ilbo] invited two experts in school architecture – Kyung-in Kim, former MD of the design non-profit organization "Happy School", and Prof. Ho-seop Ryu of Dong-eui University – for their insights.

School should be primarily the place for students 'to live'.



Wide window panes of the middle & high school building at Chadwick International allow, without extra lighting system, sunlight to light up the interior of building. The building itself is built in the shape of ' \sqsubset ', like that of a traditional Korean-style house.

The buildings of Chadwick International are built in the shape of ' \sqsubset ' derived from a traditional Korean-style house that reduce the user's movements to a minimum from any location. This is certainly different from what we usually see at local schools, most of which are designed in a straight format, with other facility features including a gym and an auditorium standing separately. Between the buildings of elementary and middle & high schools runs through a facility building equipped with a gym, a swimming pool, and a grand auditorium that is highly accessible to students. At the same time, in front of the buildings are mini gardens where learners can take a walk and relax. "A school is a living place where kids spend most of their time," Prof. Ryu added. "Therefore, such design is the outcome of efforts in thinking through the movements of kids and a sense of balance in the living environment."

In fact, there are more housing design elements applied to school than what we normally discover in school designs. In elementary school classrooms kitchen sinks and washrooms are installed, like studio apartments. As for the middle & high school building, on each floor every partition desk is set up side-by-side with a table as if you were in a small library or a living room at home where you casually read books and have some conversation. Situated in

the middle of school building, a library is very close to every classroom, allowing learners to access easily whenever questions arise while studying. "The design of Chadwick International truly proves that school is the place where kids study as well as where they live and breathe," Kim stressed.

Full of sunlight pouring in through wide and solid glass windows



Open-type library is situated at the end of hallway. At Chadwick International there are a number of spots where kids can relax or read books outside the classrooms.

Chadwick International is facing neither south nor north. Instead, it is built askew in all directions that classrooms on one side are facing southeast while those on the other side northwest. As for the elementary classrooms, however, the exterior walls are built in solid glass windows, through which abundant sunlight pour in but not a single ounce is wasted, because awnings made of *ipe* wood are hung tilted. Also, a set of indoor indirect lightings wearing covers light up the very inside the classrooms, making the perfect balance of lighting in every classroom. "The imbalance of lighting in a classroom creates that of learning," Prof. Ryu noted. "However, here at Chadwick International rooms are bright and relaxed overall."

More sunlight pours in every hall and corridor. The use of many glass window panes letting sunlight pour in in all direction is the key that even though the buildings are finished with exposed concrete, they look exceptionally well-lit. "Even just little attention to lighting would elevate the school ambience to a whole different level," Prof. Ryu added.

More rooms for music practice and art-making and for other multi-functions, than classrooms

At Chadwick international there are 32 classrooms assigned for elementary kids and 42 for middle & high school students. However, its facility features take up a much larger size in GFA, even without counting a schoolyard and an independent facility building. At the elementary school building there are a number of rooms for music practice, art-making, and science study, as well as a counseling center and a large-sized multi-purpose room, which by the way suggests the image of a gymnasium and will be used as a small assembly hall and as a temporary schoolyard when raining. Unlike most local schools, at Chadwick International a number of spaces ready to be utilized in line with any purposes of students are available outside the classrooms. "Its design thoroughly demonstrates that activities outside the classrooms, such as experiencing a variety of different cultures and playing with classmates, are part of the essential territory of learning," Kim assured.

About Chadwick International

As the first international campus for one of the most prestigious private schools in the States, the architectural design for Chadwick International is done by KPF and Korea's Gansam Partners, with KRW 150 billion injected as construction cost alone. International Baccalaureate (IB) program will be taken as its core teaching method, so each class will be based on project, not on subject. For example, 'the Spanish Civil War depicted in Picasso's *Guernica*' will be an interdisciplinary learning tool for arts, social studies, and world history while 'phenomena during flight take-off' is studied connecting physics, math and biology. "Our core teaching program will remain to help students develop their ability to think and express," R. Warmington of Chadwick International said. "However, some adjustment will be made for them to prepare for a college entrance examination in Korea as well."

Every feature carefully designed to meet users' sensibility

Chadwick International gave us the impression of a mini university campus at first. However, the inside boasts a variety of design details respecting sensibility of young students throughout the entire structure.

Strict visitor access



Administration office finished with solid glass walls is seen from outside.

At the main entrance a couple of security guards welcomed us, asking for our IDs. After confirming the purpose of our visit, they let us in. There is only one entrance to the elementary school building that immediately leads to administration office finished with solid glass walls; this open-type, transparent office structure is built to protect students from strangers and to provide parents and guardians with assistance when needed.

Principal office - less than a half the size of what we usually expect from those at local schools – is also finished with two wide solid glass sheets, leading to a corridor to the middle & high school building. "This particular design for principal office carries the meaning that instead of being authoritative, it is a space to communicate with and take care of students," Kim of "Happy School" noted. On each floor closed-circuit television (CCTV) cameras are installed; every corner is finished rounded despite its being built with exposed concrete. All details clearly show that architects- and designers-in-charge had paid great attention.

Open-type classroom with three doors leading to next classroom, schoolyard, and corridor



A washroom and lockers attached to an elementary classroom. Behind lockers is a kitchen sink installed.

Inside the elementary classroom that looks like a studio apartment is divided into two parts: one fully carpeted and the other tiled. The tiled quarter enables students do art-makings and science experiments, after which they could wash their hands at a kitchen sink or in a washroom. At the carpeted quarter a collaboration class can be held, with no teacher's platform to be seen - but only with a mini control tower for teachers to operate a projector and computers. "This type of classroom structure signifies that a teacher acts as an assistant helping students, rather than as a leader who only provides information," Kim stressed.

There are also inner doors that lead to classrooms next door, enabling students move from one classroom to another, if necessary, for learning purpose, and mingle with peers more easily.

Aside from the main schoolyard, there are four mini playgrounds reserved for elementary kids that are built slightly sunk below the ground; they are also designed to allow kids to play with their peer groups in privacy, through three doors to corridors, windows and the walls.



A view from the project room between middle & high school classrooms, in which student groups gather for discussion-oriented and collaboration classes.

For middle & high school students the space called "project room", sized about 10 *pyeong* (33 sq. meters), is separately prepared for collaboration. Outside the classrooms are a set of tables and chairs for reading. In addition, 13 science labs that amount to 1/3 the number of general classrooms are ready to welcome students.

A variety of equipments enabling video classes and discussion



Through the use of telepresence solutions students can have conversation with peers from other parts of the world.

In every classroom of Chadwick International a state-of-the-art projector with Smart Board interactive technologies are installed, enabling students write notes on the light beams that can be transmitted to their computers.

In addition, among many international schools Chadwick International is the first one to adopt telepresence technologies, with which students can have video classes and discussions in a real-time basis. Chadwick International will begin collaboration classes with Chadwick School in the U.S. and extend its exchange program with "Round Square School", the global school networks with 85 school partners around the world. "Overcoming time difference will be a major task, but we believe it will create more effective outcomes than some regular student exchange programs," Helen Lee, communication director of Chadwick International, said.

Library where kids can play, relax, talk... and lie on floors reading



A library reserved for elementary students is decorated with a set of colorful and wave-shaped book shelves and stools; it is designed to provide a special environment in which kids can read book in a comfortable position.

All libraries are situated in the middle of school buildings for the highest access from every classroom. In a library reserved for elementary students many desks and chairs, all varied in color and shape, are prepared; even the space itself is finished in colorful tones that it appears to be the place for playing rather than for book reading. Low-standing, wave-shaped bookshelves enable kids sit against relaxed or lie on top. There is also a little attic-like place where a kid can read alone. "A library at elementary school is absolutely different from that of university where students read in a fixed posture," Kim added. "It should be designed as the place where kids can relax and read books in any position as they are pleased."



A library for middle & high school students, with a high ceiling shaped like a lower part of ship. With mobiles hanging from the ceiling, the ambience is bright and gorgeous.

A library for middle & high school students suggests the image of a café. We were told that a ship-shaped structure hanging on the ceiling is the symbol of 'a voyage to the ocean of true knowledge'. It is divided into three different parts serving three different purposes: general library equipped with automated book borrowing system, personal study spaces, and private booths for peer discussion.



Black box theater for discussion and presentation for middle & high school students. Its high-quality lighting and audio system helps audiences enhance their concentration level.

At the middle- and high-school building an expression space named "Black Box Theater" is prepared. As a mini auditorium, it has seats installed against the four walls and a podium set in the middle of space. Panel pieces on the walls can be adjusted to help the voice travel as far as possible and be heard as clearly as possible, even without the use of microphones. "As the ability to discuss ideas and to present them becomes more important, this kind of space designed to encourage expressivity is very crucial," Prof. Ryu noted.

A language lab at Chadwick International is very unique too. Instead of having individual booths equipped with headphones and cassette recorders, it has grills and kitchen sinks, because language classes will be offered in more practical way, like learning English while cooking together. "Rather than repeating what is played on cassette players, learning languages in various real life situations is faster and more useful," Helen Lee explained.

Uniquely designed desks and sofas have their own purposes

Furniture design at Chadwick International fully considers the users' lifestyle. Desks at the elementary classrooms are shaped in trapezoid, with casters; they can be put together front to front to make a single hexagon table for collaboration classes. Chairs, even without casters, are light-weight to move around.

Sofas at the elementary school library are in petal shape, and kids can place their belongings on top. Such design reflects that kids hardly remain still but read books in various positions. On the other hand, desks at the middle & high school library are in a semi-circle shape, set to be standing against the walls to respect the privacy of adolescent teens.



A sofa at the elementary school library is designed for kids to lie down flat or sit while reading.

Discussion space and open library... can the local schools adopt these elements?

Hardly any local schools are able to make such a grand arrangement featuring a swimming pool, a gym and a grand auditorium, like Chadwick International. However, a number of ideas can be applied, only with minimum cost. The two invited experts – Prof. Ryu and Kim - suggest the following:

- 1) Set up a space for discussion and presentation in middle and high schools. A majority of students start taking discussion- and presentation-based classes during university years; but with no pretraining received, they tend to be frustrated facing challenges. By reducing the size of principal's office, which tends to be larger than other countries, by more than half, this arrangement can be made.
- 2) A library for elementary students should be designed to serve other extra purposes: read, play and relax. Kids should be reading books in any position they are pleased; they become interested in and attracted to reading when books are seen as friends, not as something serious and solemn.
- 3) Place tables in leftover spaces in the hallways. Kids have no place to sit once they are outside the classroom, except benches on schoolyards; they need spaces in which they can relax and chat with peers freely. Space around stairway is one of many candidates for this idea.