UCD Impact Case Study

The Inchicore Model School: a 21st-century design on education

Will Dimond & Marcus Donaghy

UCD School of Architecture, Planning & Environmental Policy

SOCIAL TECHNO-LOGICAL TRAINING ENVIRON-MENTAL

"The most immediate thing we see is the life beneath the trees, how the outdoor circulation spaces link life between the classroom and outside."

SUMMARY

When architects Will Dimond and Marcus Donaghy set out to design an extension to The Inchicore Model School in Dublin 8, they faced a series of interesting challenges. How could they take a 19th century building and bring it into the realm of 21st-century education? How could they protect the spirit of the history while ensuring that students would have the space to learn, play and grow?

By working with light, space and nature and by considering the needs of students, teachers and the local community the architects refurbished and extended the school with an award-winning design that has enriched the locality.

A new design for an old school

Times change, as do styles of building and education. So how do you bring a 19th-century school into the 21st century, while ensuring that the design works for students, teachers and the wider community?

.

That was the challenge facing Donaghy + Dimond Architects when they proposed an extension and refurbishment of the Inchicore Model School in Dublin 8.

The site, they soon saw, was rich in history. "It was built as a complement to the railway works housing and we engaged closely with that," says Marcus Donaghy, who together with Will Dimond liaised closely with the School Board throughout the design process.

The historical value of the site saw the architects working with protected structures, and they needed to identify parts of the site where they could locate a new building to extend the original school. All the while they worked in harmony with the chestnut trees that had grown up around the original school building and, above all, they needed to ensure that the end result allowed students, teachers, families and education to flow.





The original 1850s building had interesting features, such as high walls on which to hang and display maps of the world, and the architects bore in mind the trend in the early 20th century towards opening schools up to nature and the air.

"The old school has lots of light and is environmentally interesting, it has tall ceilings and looks up intro treetops, and we were able to do much more than we had anticipated with the 1850 school by clearing out divisions," says Dimond. "Then the new building is pushed up into the environment into the chestnut trees, keeping space under it to make room for playgrounds. That also has the subtle effect of pushing these new classrooms above the school walls so they are outward looking and you have this physical connection with world over the wall."



Design impacts students, teachers and beyond

The remodeling of the Model School has had a positive impact on the students and teachers, on the parents and wider community and, more broadly again, on the architectural community.

"The most immediate thing we see is the life beneath the trees, how the outdoor **circulation spaces link life between the classroom and outside**," says Dimond. "We also see that the younger children are in classes in the old building, which they call the 'stone building', where they are hugged within the walls. Then as they get older they move to the new building, which they have called the 'Treehouse', where they are looking out over the walls."

Changing the position of the school gate has made a more **welcoming space for parents and guardians to gather** as they drop-off and pick up the students, adds Donaghy.

"It means that people gather in the mornings and evenings on that pavement under the trees," he says. "It means that **spatially the life of the school extends** in a set of thresholds, from the pavement, to the yard, into the buildings."

The conservation of the 1850s building gave Donaghy and

Dimond the opportunity to carefully apply **breathable and hygroscopic insulating materials such as hemp and sheepswool**, which perform compatibly with the historic building fabric and also serve to temper and modulate classroom environments, buffering variations in temperature and humidity through the day as occupation changes and through the seasons as the weather varies.

The new school building also **pioneered the use of sustainably sourced coppiced Sweet Chestnut from European Woodlands**. The coppiced timbers are machined and laminated to make hardwood cladding and curtain walling, the detail of which was developed in association with the Timber Research and Development Association (TRADA).

The design won the **Royal Institute of the Architects of Ireland (RIAI) Best Educational Building 2015, the AAI Downes Medal 2016** - the premier award of the Architectural Association of Ireland for excellence in architectural design in Ireland – and featured among the 40 Best Works of Architecture in the **EU Mies Award 2017**, a European Union Prize for Contemporary Architecture.

The architects have published and spoken about the design in academic settings and the learning is also circling back into the UCD School of Architecture, Planning & Environmental Policy, where both Donaghy and Dimond co-ordinate and run studio design courses for undergraduates and postgraduates.



"We have learned a lot from this project ourselves as teachers," says Donaghy. "And we bring that back to our students."

For further details, drawings and a film about the Inchicore Model School project, please see http://donaghydimond.ie/