Designing Primary Schools for 21st Century Learners
2014

Competition Entries

Organised in collaboration with

OECD Centre for Effective Learning Environments
RETHINKING THE CORRIDOR
A SCHOOL DESIGNED FOR MEETING, MOVING AND LEARNING

We see the primary school as a secondary home. A place where children are at the centre of the decision and where education is an experience. We aim to use the corridors as a means to adapt children’s learning environment and create a platform for teachers and learners to interact in new ways. We propose to de-locate the traditional corridors, instead creating an environment a space in which they form a space for pupils, teachers and a space for the school.

Kim Dreyer, Architect
3rd PLACE

Coady Partnership
Anne Fletcher
COMMENDED

John O’Neill, Architect
A Mosaic for Learning

All activities form part of the public education and development, as we have thought of the process as a mosaic of learning environments. These include the schoolrooms, rooms, library, social areas and outdoor gardens. We have enclosed them together to ensure they are enclosed, making the most of the public areas around the site so students can be independent from the rest of the school. These are shaped by the learning environment and the need for flexibility. The layout of the classrooms is based on the concept of the mosaic. Each one can be extended or added for convenient at the time to ensure a blend of a simple version of the 18 classrooms with a simple modular unit.
Design Ideas Competition for a Primary School for 21st Century Learners

Entry No. CS121

We have designed a school around the principles of providing a learning environment that is flexible, adaptable, and inclusive. The design is modular, allowing for future expansion and modification, and also provides for the integration of multiple teaching spaces, enabling a variety of educational and learning approaches. The school is designed to accommodate the diverse needs of 21st century learners, providing a range of spaces, from collaborative to individual, to suit different teaching and learning styles. The design is based on the latest research in educational architecture, ensuring that the school is not only functional but also a place where students can thrive.
Mahoney Architecture
Paschal Mahoney
DELIVERING AFFORDABLE MODULAR PASSIVHAUS SCHOOLS

RATIONAL, MODULAR PLANS

First Floor Plan 1:200

Ground Floor Plan 1:200

ELEVATIONS WITH A NATURAL PALETTE

MODULAR DESIGN

INTINTEGRATED LANDSCAPE STRATEGY

PASSIVHAUS APPROACH

OECD Centre for Effective Learning Environments

Architype Ltd.
Mark Lumley
A COMMUNITY OF ROOMS

This project is a school in a community providing an educational environment that is based on sustainable principles.

The design of the school is based on the idea of a community of learning environments. The school building is divided into sections, each with its own specific educational purpose. The sections are connected by a series of communal spaces, which encourage collaboration and interaction between students.

The building is designed to be energy-efficient and environmentally sustainable. It is constructed using materials that are locally sourced and are environmentally friendly. The design also includes features such as solar panels and rainwater harvesting systems to reduce the school's carbon footprint.

The interior spaces are well-lit and naturally ventilated. The materials used are durable and easy to maintain, which reduces the need for frequent repairs and maintenance. The design is also flexible, allowing for easy adaptation to the changing needs of the school community.

The school is designed to be a place where students can learn and grow, both academically and personally. It is a place where they can develop the skills and knowledge they need to succeed in today's world.
The use of paving and textures to add fictional elements - juxtapose nature and man made. Cultivated flowers can be added to the meadow creating a rich variety of colours and differences. Small paved areas outside the ground floor classrooms can incorporate grass and solid paths to enhance using the space in all weather conditions.
David Flynn, Architect
We have proposed a school that is a community more akin to a campus or a town – a lively, network of activities which allows concepts such as ‘Flipped Learning’ to be realised whenever practical when actual local facilities and buildings could take the place of the school buildings. It is also a model that allows for reuse of these common spaces such as playgrounds or other appropriate school buildings that could be used to provide a damp, dark or wind breaks if required. As such it is a model that can be applied to a wide variety of real situations.

Whilst technology helps liberate a school from its buildings, we believe a physical place is still desirable to provide a focus, to gather and collaborate face-to-face. The school requires an identity and is built alongside the other aspects of the school’s fabric. Our proposal allows each model to be unique and locally responsive with choices in configuration, materials and form.

The model provides teachers with a choice of how to approach education and allows for flexibility in their chosen approach. It does not limit the ways in which activities can be adapted to fit the needs of the pupils or the wider world, or indeed is the wider world where that is possible. The 21st Century school should be agile, diverse, flexible, and enabling. It needs to empower children and prepare them for secondary school, work or university, and life in general. As such it should allow children to move towards increasing levels of independence to become a part of their community at all levels, from class to school to city to country to the world.

an adaptable model

This illustrates the model of an adaptable model. The principle of adaptability, rather than the building of the school, ensures that the buildings are always creative in form and function; they can always be adapted to fit the needs of the pupils and the wider world. It is an approach which encourages pupils to think about the school as a whole, an adaptable school, and not just one building.

operational flexibility

A covered area opening onto play areas beyond, allowing a range of activities from breakfast and after school clubs to small study groups which allow the Library to expand and open out into the Cafe for larger performances. The furniture offers a range of flexible study spaces in the Library itself and further study spaces in the Library for extended school and sports use.

and the school day

9.00 Regurgitate
12.30 Luxuriate
19.30 Performante
Saturday Community Use

Perspective section through the explored zone at approximately 1:500

Hone.

Senior Infants. An exploration zone within the school, the space can be used for a range of activities from registration, small groups such as SEN & EASL, teacher PPA etc.

Exploring.

Home.

Home.

Home.

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Home.
Eimear Hanratty, Architect
Wilson Architecture
Paul O’Mahony
A SCHOOL THROUGH THE CLOUD

Tom Creed Architects
Tom Creed
This school is designed to promote social interaction, easy supervision for all, and at the same time provide places for immersion. Here teachers can decide whether to focus on teaching the whole class or concentrate on project work in various group sizes. The composition of the room always gives the opportunity to divide space or classes as needed, or to collaborate with other classes within the clusters.

An organic architecture, infinitely changeable and designed after the conditions for learning. All rooms and areas have their own identity, where light, sound and air have natural qualities.

To support pupils learning in varied situations the school is organized in clusters. Each cluster is approximately 385 m2 equipped with 4 classrooms, a common learning area, a special education tuition room and a cloak area.
de Blacam and Meagher
FLEXIBILITY ON DIFFERENT SITES

PUBLIC ACCESS AT NIGHT

SITE PLAN - SCALE 1:1000

TOTAL FLOOR AREA = 2,826m²

TOTAL CLASSROOM BASE = 58m²

TOTAL SNUR AREA = 498m²

TOTAL COMMON = 80m²

PRIMARY SCHOOL FOR 21ST CENTURY LEARNERS

Robert Bourke Architects
Robert Bourke

OECD Centre for Effective Learning Environments

Robert Bourke Architects

Hillier Masters
Education and Skills

OECD

CELE

Ratana Vrdovan

JIR D.S.

E.N.O.

R.A.I

R.I.A.I.
ACTIVE LEARNING SCHOOL

Allister Lewis, Architect
DESIGN IDEAS COMPETITION FOR A PRIMARY SCHOOL FOR 21ST CENTURY LEARNERS FOR DEPARTMENT OF EDUCATION & SKILLS REPUBLIC OF IRELAND

C. J. Falconer & Associates Architects
Chris Falconer
A FLEXIBLE KIT OF PARTS

This conceptual strategic layout is not site dependent but is a flexible structure applicable to alternative sites. The three key building elements be adapted to different configurations of site with little impact on the strategic planning of the school. A truly adaptable concept for a programme of school building.

The key components are
- the classroom block
- the support
- the central market place
all set on the regular grid.

This combination of a kit of parts in a structured layout can be applied to most sites of different shape and orientation. This allows different design layouts to be developed for different schools and different sites.

The simple definition of front and back sets the initial structure for applying this solution to different locations.

STRUCTURE AND ENVIRONMENT

The building has a very simple structure of precast concrete and steel on a regular grid with glass and precast concrete external cladding.

The form of the building provides an excellent floor to external wall ratio to ensure money is spent on teaching spaces rather than complex external forms.

The cross section makes use of rooflights and internal voids to give a clear natural ventilation system through each space.

A highly insulated external envelope will ensure minimum energy use. The orientation of the internal spaces allows some solar gain in winter but overhangs and soal shading ensures there will be no overheating in the warmer periods.

SITE PLAN 1:1000

PARKING

GAMES AREA

PARKING

NORTH ELEVATION

SOUTH ELEVATION

WEST ELEVATION

FIRST ELEVATION

GROUND FLOOR PLAN

FIRST FLOOR PLAN

PERSPECTIVE SECTION

CROSS SECTION

SITE PLAN 1:1000

ARPL Architects
Gordon Fleming
Our team has been inspired by your aspirations to create a generic school with the internal flexibility to respond to a variety of sites. It stimulates pupils and teachers in existing solutions of learning, to engage with the environment in the wider sense and to an example of sustainability.
The Primary School and Special Needs Unit have been designed on a single floor level to enhance spatial and visual relationships. The building has been arranged to encourage pedestrian movement and viewing across courtyards and open spaces. The open plan classrooms ensure that the learning environment is flexible and adaptable to changing needs. The building has been designed to create a sense of community and connection among the different age groups.

The environmental design strategy of maximizing daylighting, natural ventilation and passive heating has been incorporated at all levels. The use of natural materials and textures, such as wood, stone and glass, creates a warm and inviting atmosphere. The building is designed to achieve a high level of energy efficiency and sustainability.

The design of the building has been guided by the principles of effective learning environments, incorporating features such as flexible spaces, collaboration areas, and outdoor learning opportunities. The building is designed to meet the needs of 21st-century learners, providing a modern and stimulating environment for education.
Roewu Architecture
Ideas Competition 2013 for a 16 classroom Primary School Planning & Building Unit. Department of Education & Skills

Victor Mestre, Sofia Alexio Architectos Ida.
VM/SM Archiectos
A N     R O I N N DEP ARTMENT OF
OIDEACHAIS
AGUS SCILEANNA
EDUCATION
A N D   S K I L L S
OECD Centre for Effective Learning Environments

Thomas Murphy, Architect