Design for a Post-Primary School
Kingswood, Tallaght 2012

Competition Catalogue
Vol. II
Lotus Architects
John P. Clancy, Architect
KSG Architects
Bernard McDaniel Architects
Burke Culligan Architects
A & D Wejchert & Partners Architects
Hughes Tirard Architects
Bell Philips Architects
Denis Byrne Architects
BDP - SHORTLISTED
Nonarquitectura & Vivrai Arquitectos
Pascal + Watson Architects
CAST Architecture
MADE Architekti
Jason O'Shaughnessey, Architect
MDP Consulting
Seán Harrington Architects
Ann Blackwell Architects
Lynch Architects
TMA + TRACO MINIMO Arquitectura
Deaton Lysaght Architects
Atelier Central Arquitectos Lda.
Raul G. Salgado, Architect
ARPL Architects - WINNER
Graeme Massle Architects

José Ángel Carreira Montes Arquitectura *
Cooney Architects
de Blacam & Meagher Architects
DDD Architects
Suppose Design Office
Martin Murray Architects
Zakrzewski & Hyde Architects
Regan & Associates
Paul Keogh Architects
Architecture Republic / Henchion + Reuter Architects
Anthony Reddy Associates Architects Ltd.
Anthony Reddy Associates North West Architects Ltd.
Site Specific, Arquitectura Lda.
KMD Architecture - COMMENDED - STAGE 1
EDEN Architects
McGarry Ní Éaníagh Architects
CG Design Collaborative
LOOPbz
Mullarkey Pederson Architects
DHB Architects
Treatey Architects
OM & K Architecture Studio
Joao Lucio Lopes Arquitectos Lda.
ALA Architects Ltd.
Berger Barmett Architechten

* entries not found in catalogue
The building interacts with the site in a very definite way in order to make the use of passive solar gains. So the landscape will tell the story of a movement from the immediate area around the building...the cut and fill 'tableau' and a gradual progression towards the edges from arable based crops literally fields (a bit like the movie 'Field of Dreams') towards permaculture.

Permaculture is more of an overall design philosophy than a few features for inclusion. It encompasses minimisation of inputs, maximisation of outputs and using the energy from sunlight via the building and the site. It is a system based on the study of nature, in which the principles of interaction, growth and decay, energy cycles and material flows are utilised to provide a balanced, self-sustaining design system. Our school is located on a hill and over the years the building has been extended to the south with the addition of a gymnasium. The roof is a curved roof so both of these factors allow the building to extend to the 22 m line as shown on the plans. Parking is in a series of bays along the main roadway. The playing fields can also be graded into steps to give seating. A secondary service entrance to the north of the building is show in outline above. The centre is reading university Library by Rogers and Partners. While the form is similar the roof is not a shell...in France by SNCF in house architects. This illustrates how the roof lights puncturing the curved shell will look. The building was designed and under construction in 1995 entitled Rainbow Warrior. Gaetano Pesce painted the floor with a quick drying resin finish. We proposed to use the same treatment for the floors of the curving corridors at least and possibly external plasters. Alternatively much like Selfridges in Birmingham by Future Systems a blue tromical membrane with a series of anodised discs could be used to puncture the roof. This is a second example where the main level is located on the roof. The 'Roof Plan' View

7 m Zone Upper Floor

Toilets Plant

4th-Year-Senior Classrooms

7 m Zone Upper Ground

9-9.6m / 7 m + Lockers Zone Upper Ground

PE Hall

Organisation in Plan

Parking

Art

Principal Organisation of Standard Classrooms.

Studying Leveling Floor and Excavation from top Level.

Context

Principal Organisation of Standard Classrooms.

Organisation in Plan

HT 143

Hughes Tirard Architects

R I A I
A Compact Form

A single, compact, highly efficient building minimizes footprint and external envelope whilst being of an appropriate scale for the context.

Orientation

Teaching spaces are orientated south and east to receive direct sunlight. Spaces required north- or top-lighting (i.e. arts & sports) are orientated north and west to avoid unwanted direct light.

2 storey limit - 33m to neighbour

A Campus of Faculties

Each faculty is arranged in its own distinctive, self-contained unit each with its own character and identity.

The faculties are arranged around a central 'heart'.

Classrooms

Arts

Sports

Science & Maths

Social Science

Sheltered Courtyards

Landscape gives character to different parts of the building. A view of the sky is available from every point in the school. Courtyards provide intimate and sheltered external space.

Public-Private

Public functions are arranged at the front of the school allowing for independent access out of hours. More secluded private functions are located on the upper floors or on the southern portion of the school.

A Central Heart

At the heart of the school is an active multi-functional internal and external space. This space provides opportunities for informal working, socialising, performances or assemblies and encapsulates the rhythm and life of the school.

Robust Exterior/Tactile Interior

The school is clad in robust, tough materials that give the building a grounded, coherent appearance. Facades to the courtyards will be more open, tactile and intimate.

Informal Working

Opportunities for informal working spaces are laid out through the school. These are arranged adjacent to the courtyards to provide an attractive and stimulating environment.

KINGSWOOD TALLAGHT SCHOOL

ENTRY CODE: HT929
The Belltower

Post Primary School Kingswood, Tallaght

Introduction: The conceptual design of the building programme is essentially open and engaging for the possibilities of architectural expression. The design considerations for the new building for the new area of the school are to accommodate the needs of the students, teachers, staff, and the community. The design incorporates a focus on sustainability, energy efficiency, and the use of local materials. The buildings are designed to provide a range of learning environments, from traditional classrooms to innovative learning spaces.

Denis Byrne Architects
“All learning starts with conversation.”

John Seely Brown

Concept

Our concept is based around the courtyard model. The school is designed to allow many alternative opportunities for structured and informal learning, by the creation of different teaching settings for group and individual study.

Community

Kingswood School is also intended as a new centre for the local community. The school’s civic identity is demonstrated by the pupil’s arrival sequence. It creates a new informal town square for Kingswood adjacent to St. Kilian’s Primary School. The entrance is civic, inclusive and non-threatening.

Education is always on display.
POST PRIMARY SCHOOL ARCHITECTURAL DESIGN COMPETITION FOR THE DEPARTMENT OF EDUCATION AND SKILLS

Nonarquitectura & Virai Arquitectos
CONCEPT

School design is always a sophisticated balance of many components. It is a site-specific and evolving process that involves many stakeholders. Our proposal focuses on few ideas, leaving out others. Our proposal is delivering spatial structure, that provides both efficient building and spatial diversity for informal and efficient learning environment.

1. Design efficient learning spaces in a center, providing control and mobility.
2. Compact and efficient plan, hybrid of corridor and atrium.
3. South oriented classrooms and corridor for maximum use of solar energy.

CONCEPT

Corridor buildings have the most efficient plan scheme. Larger plan and courtyard buildings provide generous social spaces. We propose a plan scheme that integrates the advantages of both, and maximizes the efficient use of the space. At the same time providing sunny courtyard, partly enclosed by building volume. Necessary control and visibility is achieved naturally. One can feel and understand whole space of school immediately when entering main lobby. General purpose space serves as heart of the building and is used for different kind of events with varied intensity, planned and accidental. There are several additional spaces, that will be stepped in the center of school, that suits for both learning and social interaction.

SUSTAINABILITY AND ENERGY

Crucial design decisions that have impact on building costs and energy saving are ones made at the very beginning. The design of building takes into consideration important sustainability measures and design solutions that include passive and active systems. The school rooms are orientated to gain maximum solar energy and atrium gives option to use natural ventilation efficiently for cooling spaces during summer period. The school should be a low energy building. During the further design process there should be extensive analysis carried out to determine feasibility of passive and active systems. A careful evaluation of the technical building systems is necessary that leads to synergy of passive and active systems integrated in building.

MADE Architekti
KINGSWOOD SCHOOL

Entry ID: A4073

Jason O'Shaughnessy, Architect
THE SCHOOL AS A TOWN

We have designed a school in the community and a school as a community. It is a school for learning, growing, maturing and to develop skills for life. It is a non-holding back school with flexible interiors and open planning to ensure ease of movement and access to the facility and the school hours.

Our inspiration is the concept of the school as town, with its own main streets, side streets, land uses, parks, gardens and distribution from public to provide spaces for social, learning, play and recreation. The school will be adaptable to the varying needs of the community by using the surrounding community, the school will be adaptable to the varying needs of the community.

Our design embraced the advantages of all sites and locations, it can be constructed in a 32-week period, within budget. The school is designed to easily expand or contract, with minimum disruption and cost and without increasing corridor lengths unreasonably. Over an annual cycle, the school will be virtually "zero energy". The school as a town, it has landmarks and simple hierarchies of routes to aid wayfinding and to support mental mapping. The controlled (but not defensive) perimeter is designed to offer protection from outside hostile forces yet it reaches out to the surrounding communities. The school is welcoming, yet secure, like a Renaissance citadel.

We have designed a school in the community and a school as a community. It is a school for learning, growing, maturing and to develop skills for life. It is a non-holding back school with flexible interiors and open planning to ensure ease of movement and access to the facility and the school hours.

Our inspiration is the concept of the school as town, with its own main streets, side streets, land uses, parks, gardens and distribution from public to provide spaces for social, learning, play and recreation. The school will be adaptable to the varying needs of the community by using the surrounding community, the school will be adaptable to the varying needs of the community.

Our design embraced the advantages of all sites and locations, it can be constructed in a 32-week period, within budget. The school is designed to easily expand or contract, with minimum disruption and cost and without increasing corridor lengths unreasonably. Over an annual cycle, the school will be virtually "zero energy". The school as a town, it has landmarks and simple hierarchies of routes to aid wayfinding and to support mental mapping. The controlled (but not defensive) perimeter is designed to offer protection from outside hostile forces yet it reaches out to the surrounding communities. The school is welcoming, yet secure, like a Renaissance citadel.

We have designed a school in the community and a school as a community. It is a school for learning, growing, maturing and to develop skills for life. It is a non-holding back school with flexible interiors and open planning to ensure ease of movement and access to the facility and the school hours.

Our inspiration is the concept of the school as town, with its own main streets, side streets, land uses, parks, gardens and distribution from public to provide spaces for social, learning, play and recreation. The school will be adaptable to the varying needs of the community by using the surrounding community, the school will be adaptable to the varying needs of the community.

Our design embraced the advantages of all sites and locations, it can be constructed in a 32-week period, within budget. The school is designed to easily expand or contract, with minimum disruption and cost and without increasing corridor lengths unreasonably. Over an annual cycle, the school will be virtually "zero energy". The school as a town, it has landmarks and simple hierarchies of routes to aid wayfinding and to support mental mapping. The controlled (but not defensive) perimeter is designed to offer protection from outside hostile forces yet it reaches out to the surrounding communities. The school is welcoming, yet secure, like a Renaissance citadel.
UNITY WITHIN DIVERSITY - POST PRIMARY SCHOOL

A principle of unity, capable of overcoming the diversity of the program as well as of becoming a learning center, was the basis of our plan for the Post Primary School. Building a place that values the learning experience as a whole, emphasizing the relationship between classmates, teachers and school. Within the concept of a distribution corridor, classrooms and halls of the school are located allowing for the learning circle.

The school building relies on a central arrangement where circulation around different areas of the building is achieved. It is decentralized in the corridors of the learning process. Despite the circular organization, it is emphasized that each area has its own identity and purpose. This is achieved by the use of light, color and texture to create a sense of identity for each area. The school building is also characterized by the definition of light spaces that are located between each classroom, providing light and ventilation to the classrooms.

The intervention intends for a school as a center of communication and learning, articulating classroom, lecture rooms, offices and social areas as a path for life. It results from the need of interpreting the given program, a program that shall define a new type of learning, giving great consideration to social areas, emphasizing informal learning.

We are given the opportunity of reorganizing the conventional school layout, where the classrooms are almost always turned onto a closed circulation corridor, creating instead open living spaces that have a connection to the classrooms. The building is also characterized by the definition of light spaces that are located between each classroom, providing light and ventilation.
A School is a powerful attraction in a place, and that power must be used in behalf of learning with joy and satisfaction. The concept behind the new school and the learning effect is linked to the provision of a unique, stimulating and adaptable environment that combines the needs of modern education with a respect for the surrounding landscape and the existing Kingswood school.

The design of the school embodies a relationship between the new and the old, between the traditional and modern, and between the public and private. The streetscape is a metaphor for the hierarchy of the open space, with the main entrance to the school, located in the middle of the space, connecting the existing building to the new school.

The aim is to create a school in which the traditional and modern are blended to create a unique, stimulating and adaptable environment that combines the needs of modern education with a respect for the surrounding landscape and the existing Kingswood school. The design of the school embodies a relationship between the new and the old, between the traditional and modern, and between the public and private. The streetscape is a metaphor for the hierarchy of the open space, with the main entrance to the school, located in the middle of the space, connecting the existing building to the new school.

The school is designed to be a powerful attraction in a place, and that power must be used in behalf of learning with joy and satisfaction. The concept behind the new school and the learning effect is linked to the provision of a unique, stimulating and adaptable environment that combines the needs of modern education with a respect for the surrounding landscape and the existing Kingswood school.
Raul G Salgado, Architect
The traditional model of a post primary school involves rigid inter-subject separation, students moving to teachers and ... circulation spaces. This subject based arrangement creates a poor sense of belonging with its inherent problems of scale.

The model we have chosen to design is based on pupil hubs as small schools within a school. 60 -70% of a pupils time is ... these general  classrooms around small social spaces with their own support spaces, lockers and pastoral care spaces.

The core of the school is the central dining and social space. Arranged as a village square the central space is...
The new school defines the conceptual approach to the design of a new Post-Primary School in Tallaght, with the express aim of helping the child to integrate within the school, and the school to integrate within the community.

- Provide an engaging space at the heart of the school that acts as the focal point for social and educational interaction between the students, their teachers and visitors to the school.
- Create a sense of excitement and involvement in the landscape that underlies the buildings and offers attractive opportunities for learning and exploration. Such spaces allow for open access.
- Identify ways in which the school and community can engage, both physically and programmatically, creating a design that is economically, socially and ecologically sustainable as part of an educational process in the local and global environment.

Central to the conceptual proposal is the General Purpose Area. Conceived as a ‘Grand Room’, this flexible, reconfigurable space is the hub of social and community life within the school.

- Animated by the activities occurring within the room, the atmosphere permeates outwards, bringing a convivial atmosphere to the rest of the school.
- Projected outwards from this ‘hub’, distinct spaces are created for the various school and community activities.
- The building is sited towards the southern end of the site, with each reinforcing the other. The building is sited towards the southern end of the site, with each reinforcing the other. The building is sited towards the southern end of the site, with each reinforcing the other. The building is sited towards the southern end of the site, with each reinforcing the other.

Potential for Photovoltaic & Solar Thermal Panels to be housed on roof.

**First Floor Plan**

* Denotes minor amendments to room template.
KINGSWOOD GARTH SCHOOL

The project is an example of a large-scale design. It begins by simulating an existing building with an added dwelling, which can be used for residential or cultural purposes. The design emphasizes the need for sustainable development and the importance of architectural planning.

The Kingswood Garth School is also designed to meet the green goals required by the community. This is done by adopting green building techniques, which help in reducing energy consumption and promoting a healthy environment. The construction strategy provides a low-cost solution for future maintenance.

1. Garth (Garth) [A large quadrangle surrounded by a cloister]
"The whole purpose of education is to turn mirrors into windows"
SHORTLISTED
KMD Architecture
McGarry Ní Éanaigh Architects
This is the gate to education, to possibilities, to the future

This modern school is vibrant and it is obvious to all that learning is taking place.

This learning environment is alluring, inspiring, diverse, cooperative and caters for the motivation and drive within you. The landscape caters for your working style, the material is soothing and soft and together with all the natural light pouring in, it gives a natural feeling to the building. The flow of the interior suggests a flow of people and the constantly changing landscape is easy to navigate on because of the minimal closed off areas.

This school awakens your curiosity and your desire to explore more and venture further, this is where you go to get informed.
Kingswood Post Primary School Competition

Mullarkey Pederson Architects

1. Car Parking
2. Drop Off
3. SNU Play Area
4. External Teaching Areas
5. St. Killian’s Junior and Senior National School
6. Ball Courts
7. Site for GAA Pitch / or other Future Community Facility

Section A - Through Typical Classroom, Lockers, Ramped Street and Dining/GP Space

Section B - View of Ramped Street

Key to Landscape Plan

Key to Layout Plans

Section C - Through Typical Classroom, Locker, Ramped Street and Dining/GP Space

Site Plan and Landscape

View of Entrance

TQ715
Post Primary School Competition Tallaght

Treacey Architects
Post Primary School Architectural Design Competition  MK008

1 - Architecture of the City

The building responds to its context with the design of the pediment, which contains the school's name, and its surroundings. It can be situated on the north, west and south sides of the site, facing the external streets, where it can be easily seen by the师生 and the community.

The building is conceived as a school, with a clear hierarchy of spaces, and provisions for different uses, such as classrooms, a library, a science lab, a art / craft and store, a staff room, a WC, a group room, a home WC, a pastoral office, a drama / music room, and a fitness suite. There are also roof gardens.

2 - Constructed Landscape

The constructed landscape is a fundamental aspect of the design, which includes trees, shrubs, and plants. The landscape is designed to enhance the pedestrian experience, with seating areas and pathways, and to provide a visual connection to the natural environment. The landscape is also designed to provide a sense of identity and character to the school.

3 - Tectonic Assemblage

The tectonic strategy of the building conveys a sense of hierarchy and texture, with the use of different materials and finishes. The building is designed to be energy efficient, with the use of insulation, passive design strategies, and renewable energy systems.

There are strong existing elements on the site which are given tectonic expression as both the process of assembly and as a means to provide a visual reference for students to engage with the heritage of the site.

Given the standard ergonomic spatial requirements there is an opportunity to exploit this as a potential to introduce some pattern of visual connections to the landscape.

Materials are chosen for their robustness such as concrete, but also for its aesthetic and sustainability qualities.

Why waste natural rainwater which could flood the area, lets use it within the schools daily needs, it is also a visible message for students on using our natural resources and how they can also be an integral part of a landscape and ecology strategy.

The other idea that we considered is water features and is to exploit areas into large and small ponds, fountains, and water channels, which can also create a sense of serenity and tranquility, as well as provide a water feature for students to engage with.

The design also deals with the access of cars and buses, for which we propose a one way system approached by a sweeping arc of trees, that reveal the 'gate house'. This plays with the notion of a threshold being a building which is not perceived as a door but rather as a gateway, and provides a clear articulation of this tectonic strategy.
This design is a compact interpretation of a modern school that must meet modern exacting standards, while being brought into being under tight financial constraints. It sits in a landscape of student centred, universally accessible, sports and social spaces. The design is able to incorporate adjustments according to other locations.

6 - Form of windows, altered across different elevations according to orientation, reduces solar gain.
7 - Local self ventilation for immediate flexible air quality/ CO2 controls.
8 - Form of windows, altered across different elevations according to orientation, reduces solar gain.
9 - Ventilation and daylight flows. Ventilation unit connected to CO2 sensors to control air flow to the central double height space where the air of the whole building is extracted. Limits heat loss, ducting and excessive use of mechanical ventilation.
10 - Light fittings with daylight detection for automatic artificial light regulation.
11 - Suspended acoustic ceiling panels to improve acoustic performance.
12 - Acoustic partitioning between spaces given different uses.
13 - Concrete core activation limits ducting and optimizes usable space.
14 - High ceilings with exposed concrete soffits.
15 - Air tightness improved by appropriate detailing.
16 - Green Wall: good acoustic quality in large space, increases sense of good for water retention.
17 - Void uses natural air flows. Ventilation unit connected to CO2 sensors to control air flow to the central double height space where the air of the whole building is extracted. Limits heat loss, ducting and excessive use of mechanical ventilation.
18 - In summer, cooler air intake in shaded area is an aid to air cooling.
19 - Incoming fresh air is heated by light shelf/radiation panel, CO2 monitors regulate amount of incoming air. Shelf help disperse natural light.
20 - In summer, roof vents are operated on temperature measurement. When it is too hot the roof vents will be open to lose heat effectively to avoid overheating in void and during the summer to save energy in very extreme conditions, the heat pump can provide cooling in the building.

The design is able to accommodate all projected student and staff numbers according to future locations and can be adjusted to the site in the development of a complex of integrated spaces.