Design for a Post-Primary School
Kingswood, Tallaght 2012

Competition Catalogue
Vol. I
Architekturbeuro Felder
Druckman Architects
Uarchitects
Bureau d'Architecture Serge Bonifas
Zaay Architects
Ether Ship
Brut Deluxe SL
Kelly, Barry, O'Brien, Whelan
Quinn, Barnwell, Buggy Architects
Impromptu Arquitectos Lda.
Renata Murnaghan, Architect
Xview-Arquitectos Lda. (AROX)
Aglet + Feeney McMahon
Michael Sweeney, Architect
Damien Dillon, Architect, Ahern & Cusack Ltd.
Arthur Gibney & Partners and Robin Lee Architecture
Scaott, Tallon, Walker Architects
James Ahern Architects & Simon Carolan Architects
Anello Architects *
Scullion Architects
Michael Kelly, Architect - SHORTLISTED
Moloney O'Beirne Architects
Robert Bourke Architects
Mafalda Brennan, Architect
Donaghy Diamond Architects
FKL Architects

de Paor Architects - COMMENDED - STAGE 1
Box Architecture
McCullough Mulvin Architects
Joseph Doyle Architects
Ozmin Hickey Architects
Project A Architecture
Coran O'Connor, Architect
MBA Arquitects SLP
Project Architecture Company
WO Morrissey & Son Architects
Bucholz McEvoy Architects Ltd.
Hilda Markey Architect, Eamon Keane Architect & Vanya Mutafchieva Architect *
Box Urban
Reddy O'Riordan Staehli Architecture
O'Mahoney Pike Architects
PAC Studio Ltd.
Robin Mandal Architects
David Flynn Architects
Ambient Architecture
ODOS Architects
Carew Kelly Architects

Gilroy McMahon NPS GROUP - COMMENDED - STAGE 1
Steve Larkin Architects
Donelly Turpin Architects
Studio Verve Architects

* entries not found in cataloge
THE SCHOOL AS A "FURROWS"  As a primary mode, in our understanding, the aim of architecture is to interpret the world and to make it visible, thus to allow us to experience the conditions of life as significant. Therefore when we approached the planning of the school, we first thought about the location of the site. The site for the school is in a "field" adjoining agricultural fields. Since we believe that building in the field is an opportunity to interpret the concept of the "field" we chose to draw a resemblance between the structure of the school and the furrows. Thus because a furrow is not just the condition towards understanding the concept of the field but also a metaphorical expression of planning.
Irish Landscape Overview.

1. Protect Irish fields by trees and boundaries.
2. Create a protected atmosphere from the exterior.
3. Connect enclosed courts with the landscape.

The school is using the landscape, making use of the slopes as a great opportunity to develop relationships between the different levels of the school.

There are no corridors between the classrooms, but a living atmosphere for the students.
Site plan - 1:1000 The same orientation is used for all representations.

**Ground Floor Plan - 1:500**

- **Reception**
- **General Office**
- **Photocopy Room**
- **Caretaker's Work Area**
- **First Aid Room**
- **Meeting Room**
- **Principal's Office**
- **Deputy Principal Office**
- **Meeting Room**
- **Physical Education Hall Facility**
- **PE Hall**
- **PE Hall equipment stores**
- **PE Tutors Control Room**
- **Changing Suite A**
- **Changing Suite B**
- **Universal Access toilet & Tutor-use Changing Room**
- **Fitness Suite (including store)**
- **Visitors' Universal Access WC**
- **General & Cleaners' Store for PE facility**
- **General Purpose/Dining**
- **Service Kitchenette, Store and Staff/Change/WC**
- **General purpose/dining**
- **Social area**
- **Library and Ancillary**
- **Pastoral Offices/Special Tuition**
- **Laboratories, Art/Crafts and stores**
- **Wood/Technology Machining and Preparation Area**
- **Construction studies/Engineering/Technology**
- **Technical Graphics Room**
- **Design & Communications Graphics Room**
- **Business Studies/Commerce room**
- **Business/computer Room**
- **Dress Design room & Store**
- **Home economics Room and Stores**
- **Art/Craft Room and Store**
- **Demonstration Room**
- **Science Laboratories and Preparation Area**
- **Multimedia Learning Laboratory**
- **Group rooms**
- **General Classrooms**
- **Social Studies Room**
- **Mathematics Room**
- **Religion Room, Meditation Area and Chaplains Office**
- **Guidance Suite**
- **Learning Support Room and Store**
- **Music/Drama Area**
- **Lecture Rooms**
- **General Classrooms**
- **Special Educational Needs Suite**
- **Central Activities Space**
- **Class Base 1**
- **Class Base 2**
- **En-suite Toilets & shower Area**
- **Withdrawal Room**
- **Multi-Sensory Room**
- **Daily Living Skills**
- **Staff toilets**
- **Linen/Sluice Room**

**Conceptual view from north main access**

- **Main vehicle access**
- **Cycling / Pedestrian access**
- **Vehicle Parking**

**Program distribution**

- **Report**

- **Architectural Design Competition**
- **1000 Pupil Post Primary School**

- **Xview - Arquitectos Lda. (AROX)**

- **MF861**

- **Building concept and Expansion possibilities**
Michael Sweeney Architect
Central to our thinking about the school as a place within civic society is the principle that the student experience should be at the core of the design, with the school as a catalyst for the local community. This is achieved by creating a series of open and enclosed spaces that are connected by shared public and semi-public areas. The school is designed to be an active participant in the life of the community, with its buildings and public spaces serving as a hub for cultural, social, and educational activities.

In architecture, the cloister is a significant element, typically square or rectangular in shape, surrounded by covered walkways or open galleries. The cloister is the nucleus of monastic life: an open-air courtyard with proximity to spaces that serve the essential needs of the community—chapels, dormitories, refectories, churches. It is an important space for social interaction and reflection, providing a transition between the internal and external environments.

The diagram illustrates the various areas of the school, including:

- **1 - Practical Activity Room**
- **2 - Class Base**
- **3 - Storage**
- **4 - Withdrawal Room**
- **5 - En-suite Toilets & Showers**
- **6 - Para-Educational Room**
- **7 - Linen Room**
- **8 - Daily Living Skills**
- **9 - Central Activities Space**
- **10 - Staff Toilets**
- **11 - Multi-Sensory Room**
- **12 - Office**
- **13 - Library**
- **14 - Staff Car Park**
- **15 - Dress Design Room**
- **16 - Business/Computer Room**
- **17 - Business Studies / Commerce Room**
- **18 - Design & Communication Graphics Room**
- **19 - Technical Graphics Room**
- **20 - Library (Lower Floor)**
- **21 - Workshop**
- **22 - Business Studies / Commerce Room (Lower Floor)**
- **23 - Design & Communication Graphics Room (Lower Floor)**
- **24 - Technical Graphics Room (Lower Floor)**
- **25 - Library (Upper Floor)**
- **26 - Workshop (Upper Floor)**
- **27 - Business Studies / Commerce Room (Upper Floor)**
- **28 - Design & Communication Graphics Room (Upper Floor)**
- **29 - Technical Graphics Room (Upper Floor)**

The site layout plan and cross-section diagrams provide a detailed view of the school's layout, including the courtyard, forecourt, and various buildings and facilities. The views towards the entrance and the courtyard from the cloister offer perspectives on how the school integrates with the surrounding community.
A shared space that promotes interaction among teachers, students and community. A great hall at the heart of the school.

Architectural Strategy

The proposal selects the former, and in learning or the better orientated, though remote, upper site. Siting guidelines coupled with the ambition for a repetitive model. In doing so, the precedent of the courtyard (A) is adopted with priority given to the quality of classroom, display, experimentation, quiet study or communal externally, favouring longevity and reappropriation over classrooms with an external terrace affording use for.

The brief is capable of housing all accommodation with existing civic structures at the bottom. A new green square at the top of the hill in dialogue marks the corner of the site potentially triggering a transition from student to employee; and a Library Centre and Skills Training supports the youth in their educational opportunities. An After-School Youth footpaths and cyclepaths connect communities; from the mistakes of our recent past proposes a light intervention on the upper site which ties to the school campus below and establishes a loose gateways or entry points and act as cafes, class-

2. The proposition eschews complex structural form-

3. Illustration in (C).  The Core model (A) is manipulated in plan (B) and section (D) to accommodate topographical programmatic idiosyncracies of particular locations or the better orientated, though remote, upper site. Siting with priority given to the quality of class-

4. View North from Meadow Walk: A school that integrates itself into a place and a community, reinforcing a common identity.

5. View North from The Grove; School forms part of a 'necklace' of Public Buildings ascending the hill.

6. Section B 1:1000  Section A 1:1000  Section C 1:1000  First Floor 1:500  Ground Floor 1:500  North Elevation  

7. SUDS landscaping; Schools and community allotments courts terraced play hard play arch/ampitheatre set down school allotments bicycle stand outdoor cafe picnic area sundy market hard play meadow walk screening housing micro forest area hard play.
A  N     R  O  I  N  N
DEPARTMENT OF
OIDEACHAIS
AGUS SCILEANNA
EDUCATION
A N   D   S K I L L S

SHORTLISTED
Michael Kelly, Architect
TALLAGHT SCHOOL

A Question of Scale

The challenge of designing a school for 1,000 pupils is in creating spaces of an appropriate scale to promote learning both through structured teaching and informal social interaction.

Our proposal organises the complex brief into an efficient layout. Two covered atria allow light into the centre of the school creating dynamic, exciting, fully accessible spaces that are charged with activity. Key ‘hubs’ provide a focal point on each level:

- **MEDIA LIBRARY & DINEING / MEETING / PERFORMANCE**
- **ART / RELIGION / MEDITATION**
- **MULTI-MEDIA GARDEN**

We propose a compact building with three storeys. This has the following advantages:

- **Low construction cost**: The external wall to floor area and the area of foundations and roofing are all kept to a minimum.
- **Energy efficient**: A compact volume is significantly cheaper to heat than a single or two storey building.
- **Flexible design**: This design can easily be adapted on other sites with minimal change.
- **Accelerated construction**: The concrete frame structure with pre-cast floor slabs can be erected quickly, allowing other trades to commence earlier in the construction process.

The building is positioned close to the existing neighbourhood centre, primary school and community centre. Entrances are arranged to allow the community use of the spaces, home economics, library. The Sports Hall is a separate building, located to give direct access to the playing fields and sports pitches.

The spaces between classroom clusters and the corridors themselves provide a variety of informal learning and social spaces for individual use and group interaction.

Shared area between classroom clusters for inter-class learning

The "Living" corridor encourages social interaction and study.

Flexible layout: The reinforced concrete frame allows maximum flexibility of room layouts. Partitions can be re-built in the future within the same 7m x 7m grid to meet changing teaching requirements.
Box Architecture
The concept reflects the right and left sides of the brain as well as the entrance to school, the life of the body and the intellect–the abstract field of culture and the sporting field of dreams: west facing to the twenty first century requires a vision and energy that embraces new ways of thinking about education, new technologies and innovations, flexible attitudes to educational psychologies and adaptations to changing social norms. This building is set close to the boundary of its field and faces out to the landscape. Each volume anchors a strong spine of teaching and learning rooms and opens out to a group of specialist teaching ‘fingers’, surrounding an intense and vibrant social space. At the heart of the school has been provided in the zoning and grouping of rooms. Providing a strong civic building of importance in the community. 'Added value' items have been included to enhance the building as a vehicle for learning. These include the provision of the duration of a day, the possibility of growing food for consumption or expenditure, and recognition of the individual within the scale of the buildings and the grouping of rooms.
CE606

- A school is, in a way, a micro-city
- The form follows the model of industrial agricultural constructions suitable for the urban edges of settlements
- The S. field location enables:
  - basic classrooms to face S.E.
  - relate to the urban context
  - space for school buses and cars
  - main entrance and playground to the S.
- A practical and cost-effective integrated sustainable design with an airtight construction U value 0.17 W/m²K
- Natural solar collection using asphalt-paved areas transferred for storage beneath the school
- Structural precast concrete elements set out on efficient 7.0 m x 7.0 m grid
- Glulam laminated timber roofs finished with Zinc sheeting.
Flexible Grid

The post primary school of the proposed school will be a place for students to learn and thrive. The grid-based design of the school provides a flexible framework for promoting learning, interaction and play in the external space and courtyards enclosed by the school. The outdoor spaces thus become integral to the design as each has a unique sense of place, special to the specific needs of the students.

The large entrance foyer is located in front of the vehicular entry off Ballymount Rd, Kingswood Avenue vehicular access entrance. The other parcel of land to the north-east of the site is used as a parking area. The proposed school is located in the south west area of the site, directly connected to the Ballymount Rd, Kingswood Avenue vehicular access entrance.

The building is organised as four 2-storey pedagogical 'bands' that act as a framework for promoting learning, interaction and play in the external space and courtyards enclosed by the school. The outdoor spaces thus become integral to the design as each has a unique sense of place, special to the specific needs of the students.

The grid of school teaching facilities manages to break down the tradition-oriented pedagogical structure to the students, staff and the community. The grouping and location of specialist and non-specialist rooms are arranged in a logical order in the building, the four circulatory overlaps create informal zones of lockers, vertical circulation and social spaces, each with its own identity that the students can make their own.

The grid also reduces travel distances, as its organisation of programmatic 'bands' creates circulation overlaps, minimising extension corridors while helping maximise social interaction between the students, staff and the community.

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Box Urban
a series of school gardens at different levels. The concept of green spaces supported by central activity areas. A view of school exterior.

concept diagram 1

concept diagram 2

concept diagram 3

view of school exterior

section a-a 1:300 section b-b 1:300

section b 1:300

department of education

site plan 1:1000

grand floor plan 1:300

second floor plan 1:500

first floor plan 1:500

floor plan 1:1000

floor plan 1:1000

floor plan 1:1000

floor plan 1:1000

section in 1:300

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SK001 LEARNING CLIMATES

KEY
- Key Areas
- General Classrooms
- Specialist Classrooms
- Art / Design
- Science
- Social Learning
- Music / Drama
- Home Economics
- Dress Design
- General Circulation
- General Purpose / Library
- Staff / Administration
- Group Learning
- Sens Unit
- Sports / Gym

FIRST FLOOR
GROUND FLOOR
LOWER GROUND FLOOR

PAC Studio Ltd.

RIAI
The new school is located to the North of the site so that the majority of teaching spaces face South and overlook parkland. This leaves the Southern portion of the site available for playing fields. Entrances to the North have been separated from each other leaving a civic approach for students.

44% Teaching space accounts for just under 44% of the brief.

72% In this proposal, three-quarters of the principal spaces face South (Teaching, GP, Library).

More than any physical material, sunlight has the strongest influence on the quality of space and the educational experience. Solar orientation has determined the layout of every aspect of this school. Teaching spaces, the library and GP room face South. Offices, PL, Corridors and Stairs face South. A series of linear central lightwells animate social and circulation spaces. The layout is simple, efficient and easy to navigate. With effective orientation, circulation space is arranged to become colourful and vibrant social spaces. The compact layout creates a lower external surface area and dramatically reduces heat losses. The roof space volumes incorporate solar photovoltaic panels for solar collection surfaces.

David Flynn Architects
Post Primary School Competition

Carew Kelly Architects
Partially exposed concrete ceiling of thermal mass to limit summer temperatures.

Openable vent panels in addition to windows provide for secure night time ventilation.

North facing classrooms look onto trees that catch sunlight, minimizing overheating.

South facing façade incorporates smart sectioning and controlled shading to restrict summer solar heat gains.

Natural ventilation.

PLANET EARTH
HOW STUFF WORKS, DISCOVERY WORKING IN GROUPS - MULTI DISCIPLINE SHELTERED SCIENCE & TECHNOLOGY LINEAR WORKSHOP - SOCIAL & CULTURAL SPACE WHOLE SCHOOL LEARNING AND LIFE EXPERIENCE - LINEAR WORKSHOP, MULTI DISCIPLINE TEACHING ZONE

ENTRANCE
FRONT ELEVATION 1:500
GROUND FLOOR PLAN 1:500
FIRST FLOOR PLAN 1:1000
SECOND FLOOR PLAN 1:1000
CROSS SECTION 1:500

LINEAR WORKSHOP - SOCIAL & CULTURAL SPACE
WORKING IN GROUPS - MULTI DISCIPLINE SHELTERED LINEAR WORKSHOP PROVIDES SPACES FOR STUDENTS TO PUT THEORY INTO PRACTICE.

WELL BEING - PHYSICAL & MENTAL

SPORTS ZONE - CROSSOVER BETWEEN PRIMARY & SECONDARY SCHOOLS

THE GARTH

ST. KILLIANS

SPORTS ZONE - CROSSOVER BETWEEN PRIMARY & SECONDARY SCHOOLS

POST PRIMARY SCHOOL ARCHITECTURAL DESIGN COMPETITION KINGSWOOD, TALLAGHT

COMMENDED - Stage 1
Gilroy McMahon NPS GROUP
The Key aim of this proposal is to develop a rich network of social spaces for students, staff and local community. The aim is to promote social inclusion with a linked pavilion strategy that develops an atmosphere of openness, responsibility and social activity. Circulation, Community Space and External Areas can be accessed from a number of points promoting active communication in the community.

Steve Larkin Architects
Donnelly Turpin Architects
ARCHITECTURAL DESIGN COMPETITION FOR 1000 PUPIL POST PRIMARY SCHOOL KINGSWOOD TALLAGHT DUBLIN

SITE PLAN 1:1000

...staggered sliding strip concept flanking a sequence of central adaptable shared spaces and courtyards.

GROUND FLOOR PLAN 1:500

FIRST FLOOR PLAN 1:500

LONG SECTION 1:500

VIEW OF MAIN ENTRANCE

VIEW OF COURTYARD, STAIRWAY AND SOCIAL SPACE

AERIAL VIEW

STUDIO VERVE ARCHITECTS