

Designing with Children

Gelsenkirchen Bismarck EGG

In Gelsenkirchen-Bismarck, a former industrial suburb which had developed around a coal mine in the Ruhr area, there is a diverse intercultural community. The local protestant church envisaged a school, which would bring together children of many different cultures and at the same time act as a local catalyst for environmental awareness. Together with IBA (International Building Exhibition) Emscher Park, they prepared a brief for the school, launching an invited architectural competition in 1993, which was won by Stuttgart-based architect Peter Hübner. The core of the competition proposal from his studio Büro plus+ was a sketch of the school, accompanied by a narrative from the near future. The story describes the life of a boy, a son of poor Turkish emigrants, who flourishes into a renowned ecologist, receiving a European Environmental Prize in 2023. By describing how his knowledge of the world and ecology developed through being part of the process of helping plan and build the school, Hübner and his team depicted how both the development process and also the future implications of their proposal, would work.

The project was also supported by the administration of the District Office of Gelsenkirchen Bismarck/Schalke-Nord, the Gelsenkirchen Council, Society for Employment Promotion, Professional Education and Socio-Culture and the school headmaster Rainer Winkel.

Motivation

There was a strong emphasis on the educational goals of the process. The school was envisaged as a 'house of learning', where environmental education would play a key role. Strong links with the community were proposed, being physically integrated with a local park and sharing school facilities (the main hall, workshops, refectory and classrooms) with the members of community.

The school was intended to support positive role-models and aspirations in a district which has been labelled as 'stigmatised'. By involving students, teachers and parents in the design

What

School building

Where

Gelsenkirchen, Germany

Age

11-16

Group Size

Whole school

Project Stage

Brief, Concept, Construction, In Use, Technical Design

Children's Roles

(Co) Designers, Builders, Creative Inspirers, Expert Consultants

Timescale

1997-2004

Partners

Peter Hübner (Architect)

Büro plus+ (Architects)

Cristoph Harms (Landscape architect)

Pupils of the Protestant Comprehensive

School Gelsenkirchen-Bismarck

(Participants)

process, a strong feeling of identification with the school environment was expected to form along the way.

Children's involvement

The children, their parents and teachers were involved in the process from the design stage, until the very practical work of building parts of the school with their own hands.

The ideas of participants were taken as inspiration by Peter Hübner and his team of architects, allowing the project to develop from its own individual circumstances, accepting the ideas of the users. In the words of Peter Blundell Jones: *'rather than god-like creator, the architect becomes a kind of midwife at the building's birth, guiding the forces that demand its existence and giving them physical shape. It is almost as though the building is already implied by the place and people, and the architect must simply find it'* (Blundell Jones 2007: p. 99).

Children were involved in planning, modelling and construction of the school, in a process which was carried out during two days. Hübner 's architectural studio staff came to work with the pupils and teachers, involving them in various participative activities.

The first thing the pupils were asked to do, was to make clay figures of themselves, at the scale of 1:10. They used these as a starting point to discuss what types of furniture they needed, arranging actual chairs and tables in the playground to get a feel for space and scale.

Children were invited to think about their houses and what kind of rooms and spaces they offered, and how that related to what classrooms are used for. They brainstormed ideas about the 'classroom-houses' they were designing, and played around with different issues related to building a brand new house – including what materials to use, what types of roofs there are, what kind of windows to use, the orientation and lighting, and many more. They built softwood frame models to explore structural principles and how they fit together.

The architects then incorporated children's ideas into the final design, collaborating with a structural engineer and coordinating proposals with the other architects who were working with different groups of children. Returning to the school, the pupils were shown a 1:10 three-dimensional computer model, and were asked to make models, showing proposed changes and adjustments. These were discussed together with the architects, teachers and parents, and once again included in the final design proposal.

After the contractors had set up the basic structures, the teachers, pupils and parents continued to work on finishing and fitting-out, following the learning-by-doing principle.

Children also worked with a landscape architect Cristoph Harms to design the school garden, and they continued to work on the garden as part of their education about growing food, rainwater catchment and learning how to make habitats for insects and small animals. The design was intended to be flexible, dynamic and interactive, so the children could keep shaping their own garden as a powerful tool to influence the environment.

Outputs and outcomes

The school was completed in 2004 and it is in use, functioning as an environmental and

eco-build showcase building for the wider community.

Resources

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Courtesy: Peter Hübner (Photographer)



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