

The Baupiloten create “Water Worlds” in the Galilei and Liebmann schools in Berlin-Kreuzberg

The Galilei School and the Liebmann School for the Speech Impaired share a building located in Berlin-Kreuzberg (Friedrichstrasse 13) that was designed by architect Gino Valle for the IBA in 1984/87 (International Building Exhibition). A major impetus for its reconstruction was the desire to improve the usage quality of the building's hallways by creating new learning spaces. In the past, poor acoustics in the building's hallways and stairwells had become a particular nuisance for teachers and pupils alike. The Baupiloten used this technical renovation as an opportunity to both redesign the rooms that were most affected and install additional “learning zones”.

Water Worlds

The pupils were directly involved in the design process. They conceived of the idea of a **Water World**, which has been superimposed on the main structural themes developed by Gino Valle. In place of the themes of field, house, and the sky, the buildings different levels are now represented by green for the deep sea, red for the reef and blue for the water's surface. Additionally, a waterfall theme has been designed for the stairwell. Sound absorbers have been applied to the walls and ceilings of the hallways and stairwells to improve the acoustics. Each grade now has its own individually designed learning and relaxation area for small groups. A communal “Learning Island” has also been created on each floor for medium-sized group projects. To improve the stairwell acoustics, the Baupiloten developed baffles which the pupils continue to equip with small glass-bead sculptures. Colour reflecting panes were also installed in windows, which receive significant amounts of direct sunlight. The children can control the light and reflections created within the school building.

Pupil Participation

The Baupiloten held workshops in which they worked together with pupils to develop the fundamental ideas for the school's remodelling. These ideas were then refined through group discussions and presentations within the workshop setting.

Design of the lounge corners and hallways

Pupils who participated in the workshops were directly involved in the design of the optimized acoustics and lounge corners. Their pictures and handicrafts were graphically rendered and placed on the walls within the leisure areas. It is here that the themes of the building's different floors (deep sea, reef, water surface) were developed in greater detail. While the water surface is represented by sea waves or sparkling, one can discover sunken ships or mermaids within the reef. The deep sea is teeming with life and features water snakes that protect sunken treasures, starfish, assorted deep-sea fish and sea horses.

The Stairwells

One of the children's wishes was to „plunge into another world behind the waterfall”. The Baupiloten were able to materialize this by constructing a stream of sound absorbing pillows and baffles flowing down all three floors of the school building. The pillows are made of a silver-coloured reflective textile fabric filled with insulating material. The pupils can construct small “mascots” out of wire and glass beads and hang them on the “waterfall”. This is part of the long-term phase of pupil participation: year after year, the children can leave their trace on the “waterfall” by continuing to add their “crowns of spray”.

Light reflectors and light divers

In some windows sunlight can be transformed into “star swooshes” or “twinkling fish”. A corresponding installation made of revolving wooden discs with both translucent and partially reflective screens allows the children to experience the world of the diver, gliding through greenish blue water past schools of colourful fish within the twinkling light of the sun's rays. Using this equipment, the pupils can project the reflections of sunlight onto the walls, floors and ceilings.

The **Baupiloten** are a group of students at the Institute for Architecture within the Berlin Technical University's Department for Planning, Construction, and the Environment. Under the leadership of architect Susanne Hofmann AA dipl, the Baupiloten conduct their studies through the realization of actual building measures. The students experience the architectural curriculum as a praxis-oriented ideal and take part in all phases of design and construction.

Baupiloten: Melanie Berkholtz, Tanja Freund, Anna Ohlrogge, Robert Tesch, Beatrice Traspardini, Katja Zimmerling (Entwurf), Amaia Sánchez Velazlo, Benno Fiehring, Florence Harbach, Gaspard van Parys, Jorge Valiente Oriol, Leif Lobinski, Neli Pavlova, Quentin Nicolaï, María García, Clara Rodriguez, Sophie Mundzik (akustischer Entwurf), Quentin Nicolaï (Ausführungsplanung) **Project Manager:** Dipl.-Ing. Constantin von der Mülbe **Graphic Design:** Florencia Young and Sol Matas on the basis of pupils' drawings

Start of Planning: October 2006 **Start of Construction:** March 2008 **Completion:** December 2008

Client: Stattbau Berlin – Stadtentwicklungsgesellschaft mbH

Support Programs:



Contact Susanne Hofmann AA Dipl. tel. 030 314 289-23, post@baupiloten.com, www.baupiloten.com
Address: TU Berlin, Sekr A1, die Baupiloten, Strasse des 17. Juni 152, 10623 Berlin **Photos:** www.janbitter.de