Building a boat? Child’s play!

On April 6 and 7, as part of the initiatives for celebrating the 150th anniversary of the foundation of the Milan Polytechnic, a series of teaching workshops dedicated to boating were organised in the laboratories of the Design Department. They were aimed at primary and secondary school children themselves handling natural fabrics, cork panels and curious materials for creating the vacuum without any risk.

Making a sail
There was also considerable participation and support from companies in the workshop dedicated to sail making, with a perfect synthesis between professionalism and the spirit of participation from the sail designer Michele Malandra of North Sails Italia on the Saturday, who handed over to Elvstrøm Sails director Marco Pomi on the Sunday.

Besides staff and technicians, they provided project drawings and materials for making, together with the older children, the sails of the small dinghy that will be used as soon as the boat is rigged and ready to take to the water. While the older children were making the sails, the younger ones practised by making model sails from panels drawn to scale on sheets of paper that could easily be cut out, assembled and coloured.

Model building
Another activity that proved very successful and involved not only the children but also their parents was the building of scale models of sailing boats. The workshop took place in the large Fitting Out Laboratory, in the centre of which a transparent tank full of water was there to test the final results.

Knots, designs and technical tests
unlike the first three workshops, where activities were carried out in groups that had to book and were divided into three shifts, the other two laboratories were more open, both as regards access and the age of participants. In the knot laboratory, with the help of Polytechnic personnel, older and younger children learn to recognise and tie the knots most commonly used at sea. In the design laboratory, the younger children could draw, colour, cut out and build cardboard models of small sailing boats.

The initiative, entitled “Building a boat? Child’s play!” Was organised and coordinated by Prof Andrea Ratti of the design department, co-director of the Polytechnic Master in Yacht Design and for years involved in teaching and research into boat building materials and techniques. These sectors were the fulcrum of the event, where participants were able to take part in the building of the full-size hull and deck of a small boat using modern production techniques, and also help make the boat’s sails. There was considerable participation in the event, which on Saturday and Sunday saw more than 350 children between the ages of seven and 13 attending. Both days opened with a plenary lesson from Prof Silvia Piardi, director of the Design Department and of the Master in Yacht Design and also a keen sailor.

The construction laboratory
The laboratory where the boat, El Niño, was built using infusion techniques was set up in the middle of the large atrium of the Design School building. There were six teams, each of about 20 children, who took part in turn over the two days. The hull was built on the first day, the deck on the second. The boat was a new dinghy for children designed by Matteo Costa with an innovative construction where traditional fibreglass was replaced by a sandwich using linen fabrics and a cork core, with vacuum infusion in epoxy resin avoiding direct contact with the workers, in this case the children, who could enjoy