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RESEARCH WITH IMPACT



## RESEARCH HIGHLIGHT PSP

### SudTEC - Science and technology workshops for tomorrow's researchers

"It all started with RoboTEC in 2007," explains Nicole Schlichtenhorst, who, as regional manager for PROSUD – a programme for children aged 4 to 12 that brings science into schools in the southern region of Luxembourg – runs all of the activities of this syndicate of eleven communes, yet clearly puts her heart and soul into this particular project.

#### Robotics and more

RoboTEC is a 3 to 6 hour long workshop for primary school children. Starting with a short theoretical introduction on robotics, informatics and mechanics, the workshop rapidly becomes hands-on and by the end, the pupils are able to program robots to run simple obstacle courses.

Since then, SudTEC has seen considerable expansion: by 2014 the programme also offered FabLABKIDS SUD (fabrication laboratory), RoboTIC SUD, ColorLAB SUD (chromatography), EnergyTEC SUD (electricity and alternative energies), Knobelspiller SUD (problem solving) and Versuch macht klug (principles of physics). The common thematic denominators are science and technology.

Nicole Schlichtenhorst and her colleague Lydia Pallucca have a clear idea of what the courses should entail. Together with a number of partners such as the SnT-University of Luxembourg, Science-Club, Déi kleng Fuerscher, l'Association des Mathématiciens Luxembourgeois and the Technoport/FabLab Luxembourg they search for ideas that are then tailored to fit SudTEC's objectives.

#### A slightly different morning in school for a rising number of pupils

The primary focus of all activities is that the children have fun whilst gaining scientific knowledge. Workshops are to be interactive and allow learning by doing. Ideally, the pupils finish the day not only with a certain affinity for science and technology, but with a material reminder, such as a simple, self-manufactured electric motor, too.



Importantly, the workshops are run within school hours. While this can be an organisational challenge, it ensures availability for all. "We do not want to be a drop in the ocean," says Schlichtenhorst. "We have taken care to offer at least one workshop for every primary school cycle," adds Pallucca.

The programme is clearly successful: starting out with 342 pupils attending RoboTEC in the first year, the number had more than doubled a year later. By 2014, an offer of seven different workshops drew 1,224 pupils and more than twice again that number is registered to take part in 2015.

#### New workshops for 2015

Participant numbers have risen nearly 8-fold since the beginning and Schlichtenhorst and Pallucca are by no means reluctant to further expand the programme. Animators' fees, material costs and location rent have so far been covered by the FNR's Promotion of Science to the Public programme.

Beside a new cycle 2 workshop (KitchenLAB SUD, chemical reactions), the 2015 programme will see one other major addition: through a cooperation with the ScienseensLab run by the LCSB-University of Luxembourg, SudTEC activities now also target high school students.