

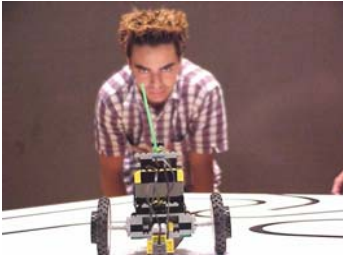
NaT-Working

A network of high school students, teachers and scientists

$$\frac{x}{y}$$

Idea

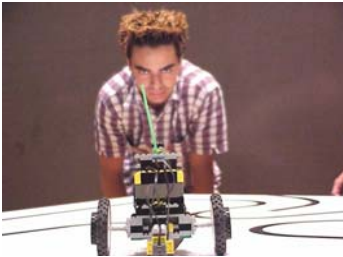
NaT-Working



- : inspire enthusiasm for science and engineering in young people
- : encourage more people to take an interest in science and engage in science-related activities both at school and in their spare time
- : identify and support young talents who are likely to take up science and engineering in their university education and future career
- : initiate and foster close contacts between science teachers and scientists /engineers

Funding scheme

NaT-Working



several scientists of a university or research institute set up a network of cooperation with 2-5 highschoools in their region

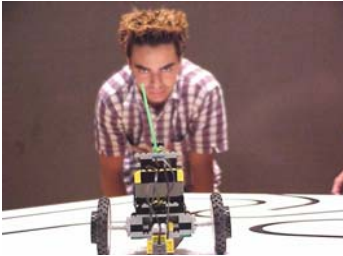
: together with science teachers they develop, implement and manage a science and/or engineering project for students

: regular meetings between students and scientists are a strict requirement for funding – we want the scientists to share their interest and enthusiam for their subject

: aim: students should understand the principles of scientific research (question, hypothesis, experiment...)

Facts and Figures

NaT-Working



- : since 2000 we have funded more than 140 projects throughout Germany
- : more than 8 million Euro went into the program. NaT-Working is the largest funding scheme of its kind
- : we only fund projects, if they are designed to run for at least three years (maximum period: 5 years)
- : annual meetings created a national network of initiatives

Project types **NaT-Working**

Examples

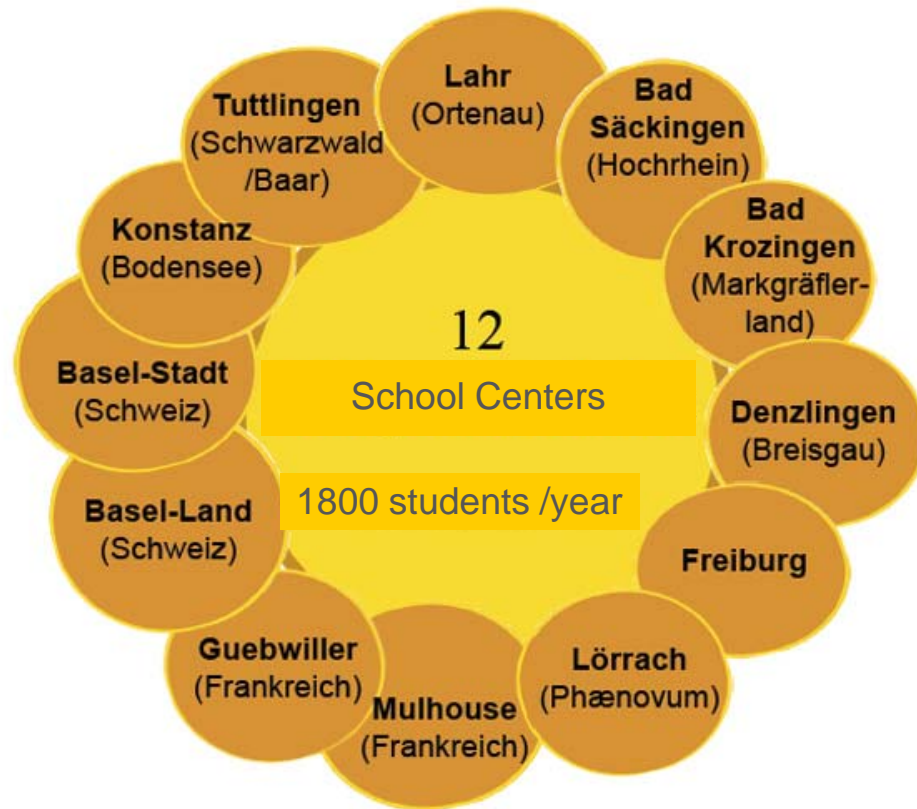
- : School labs and school networks
- : Summer schools
- : Joint teaching or experimental classes
- : Curriculum development
- : Continuous teacher training



Project examples

NaT-Working in molecular biology – School Centers

A model for areas far away from universities



Project examples

NaT-Working in molecular biology – School Centers



Teacher Training for the head of school lab teachers

Basic experiments in molecular biology at the school center labs (500 students/year)



Scientists visit the schools

Advanced experiments at Freiburg univ.

Excursions



Trinational student congress (D/CH/F), Schloss Beugen

Project examples

High Sea – Science and Education @ AWI



Joint project between the Alfred Wegener Institute for Polar and Marine Research (AWI) and schools in Bremerhaven



Students with a special interest in science apply

22 are accepted per year and spend each Tuesday and Thursday at the AWI



all science and english classes are taught at the AWI – jointly by teachers and scientists

AWI research projects are part of the classes, AWI and the teachers ensure that students reach unified university entrance level requirement

NaT-Working Current status



continuous funding of networking and teacher training activities

publication of teaching and classroom material developed in the projects



award for science in school activities

annual conference on inquiry-based learning and research at school activities in cooperation with the Körber-Stiftung and the Deutsche Telekom Stiftung



NaT-Working

Lessons learned



high school students benefit greatly from direct interaction with researchers



teachers update their knowledge of their field of study

researchers learn how to communicate their topics to a demanding, but non-specialized public
they experience the enthusiasm of young people and are able to recruit talents for their field.



Thank you very much!

