



The Little Scientist's House (Germany)

Summary

The "Little Scientist's House" has provided 200,000 children with the opportunity to discover their interests and talents in natural sciences and technology. The "Little Scientist's House" foundation has organised workshops where children's interests have been encouraged and stimulated by teachers. During these workshops, children have worked together to solve problems and exchange ideas. This co-constructive education process has stimulated curiosity and enthusiasm about natural sciences and technological phenomena. The workshops have also provided children with basic competences, such as learning, language and social competences and motor skills.

The project

The 2006 Programme for International Student Assessment (PISA) survey showed that German pupils do not have sufficient skills and knowledge in natural sciences and technology. PISA results also showed that gender differences in attitudes to science were prominent as males reported more positive characteristics on at least five aspects of attitude. Considering that innovative capacities in the fields of natural sciences and technology are essential to the future economic development of the country, the "Little Scientist's House" initiative has been launched to create enthusiasm towards science and technology amongst very young children.

Sector(s) covered

Main Sector

Education & Training:

Other Sectors

Science and Technology

Approach

The project is based on three main principles:

Curiosity and enthusiasm as the gateway to natural sciences and technology - curiosity and enthusiasm are key to positive contact with natural sciences and technology for both children and adults. Most children have a natural interest in natural science subjects, which is driven by curiosity. The "Little Scientist's House" foundation has organised workshops, where this natural interest was encouraged and stimulated by teachers in a way that is appropriate for children.

Children and teachers design the learning process together (co-construction) - children learn by working together with others, but also by individual exploration and shared reflection. The learning process is "constructed" by both children and professional teaching staff. The aims of co-constructive education processes are to:

- § Develop new contents together;
- § Solve problems together;
- § Exchange ideas; and,
- § Get to know different perspectives.



Promotion of basic competences – in addition to stimulating curiosity and enthusiasm about natural sciences and technological phenomena, the project also provides children with basic competences such as learning, language and social competences as well as fine motor skills.

The main activities developed by the “Little Scientist’s House” initiative are workshops (involving teachers and children) and promotion days (such as “Day of the Little Researchers”). Furthermore, teachers and early-childhood educators interested in natural sciences, and also natural scientists/engineers, have been trained by the “Little Scientist’s House” foundation in order to be able to teach children and conduct workshops.

The “Little Scientist’s House” initiative has also set up local networks coordinated by a wide variety of stakeholders, e.g. by day care supporters, communities, private persons, museums or universities of natural sciences. These local networks offer and realise activities and educational programmes for day-care organisations in order to encourage the children to get closer to natural sciences.

Element of innovation – the process

tailored to the intellectual capacities of children.

The approach developed by the Little Scientist's House” is unique in Germany. The innovative and creative methods developed have been

Key successes

(outcomes, results, impacts)

During the pilot phase in 2006, the initiative was implemented in 50 pre-schools in Berlin. Since 2007, the offer has been extended to the whole of Germany.

So far, 80 local networks have been initiated, more than 3,000 institutions have been involved and 6,000 teachers have been trained. In total 200,000 children participated in the “Little Scientist’s House” programme. The project plans to expand the activities to up to 47,000 institutions.

The feedback from the beneficiaries has been very positive. Moreover, the “Little Scientist’s House” received support from the Federal Ministry for Education and Research. As far as communication is concerned, regular contact with the national press is maintained. Upcoming events and general information are announced on the project website.

Special Highlights

The “Little Scientist’s House” initiative has developed an innovative and creative approach to stimulate children’s interest towards natural sciences and technology. On the one hand, children can participate in workshops exploring different topics and undertaking practical experiments. These workshops enable the discovery of shared solutions and the exchange of experiences and ideas.

On the other hand, teachers and early-childhood educators interested in natural sciences, and also natural scientists/engineers, can receive specialised training to be able to teach children and conduct workshops.



Key characteristics

General purpose of the practice	Stimulating creating thinking and behaviour
Target group	Children between 3 and 6 years, teachers and schools
Type of learning	Informal
Level of implementation	National
Funding	Private and public
Time frame	Started in 2006, ongoing
Leading organisations	Stiftung Haus der kleinen Forscher

Further information

Website of the project www.haus-der-kleinen-Forscher.de

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