

Wissenschaftliche Herausforderungen

Project Report





INTRODUCTION E OBJECTIVES

The Wissenschaftliche Herausforderungen (Challenging Assumptions) project was developed and delivered in 2017 by Native Scientist in partnership with the Goethe-Institut London. It consisted of organising German STEM (Science, Technology, Engineering and Maths) workshops in 8 different European countries.

The project focused on the theme of dissecting scientific conceptions and misconceptions that helped shape our understanding of the world and the following main objectives:

- to bring together German scientists and pupils who learn German in school;
- 2 to promote language learning and multilingualism (speaking more than one language is a valuable skill at a personal and professional level);
- 3 to promote science learning and break stereotypes about scientists (not all scientists are mad-haired man and are isolated in their ivory towers);
- 4 to give pupils a positive and exciting memory in German.

The project's website is available here: www.nativescientist.com/challenging-assumptions

WORKSHOPS & FEEDBACK

We delivered 13 workshops and reached 236 pupils in the following cities: London, Glasgow, Dublin, Amsterdam, Oslo, Stockholm, Helsinki and Copenhagen.

Each workshop counted with 3-4 scientists and 1 coordinator. A total of 20 scientists took part, covering a variety of topics:

- how viruses, bacteria and parasites cause diseases;
- what colours are made of and why red is red and blue is blue;
- the role and function of different organs in the body;
- climate change and the development green plastic;
- biodiversity in the deep sea;
- phenomenons in space;
- the use of informatic tools to describe biological processes.
- what are the causes of earthquakes.

Pupils' feedback

According to our records, a total of 236 pupils participated in the project. All pupils enjoyed meeting the scientists. 99 % learned about new scientific concepts. 98% recognised that they were able to improve their German language skills during the workshops.

Importantly, in a worksheet given to pupils to think about being a scientist, some students showed an interest to become a scientist or pursue a science-related career:

"I'm going to study chemistry in Essen, Germany."

"If I were a scientist, I would try to find out what stars are made of and build one myself."

"I would like to work in astrophysics and find new planets"

"I want to study Medicine and find a cure for cancer."



Teachers' feedback



"I felt privileged for our children because they were able to come into such close contact with esteemed scientists and better yet, solely in German. Lovely lunch and time to network, too. Many thanks, would definitely repeat."

"The students were very impressed by the presentation and learned a lot. Compliments for the scientists who offered this workshops." "The students were very impressed by the presentation and learned a lot. Compliments for the scientists who offered this workshops."

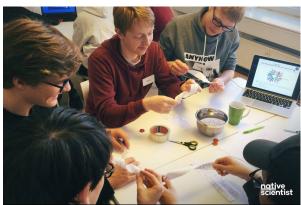
"Excellent day allowing students to develop their language skills in a relaxed environment. The interactive workshops allowed students to develop an understanding of the key terms at a fast rate."





"We were delighted to have this opportunity, thank you. I think the students found the activities very interesting, although the language was challenging for them at times. I think my students felt quite shy as well. Overall I think it was a great day, I would definitely repeat it. Thank you very much indeed for having us."













At the beginning of the project, Native Scientist created a logo, a website and a set of branded material for the workshops (certificates for pupils, stickers, lab coats, etc). In each country, 3-4 German-speaking were recruited and trained on how to explain science to pupils. Participating scientists were also provided with specific information about the pupils (such as age and level of German).

At the same time scientists were being recruited, the Goethe Instituts in each country were informed about the participating scientists and theirs topics/specific vocabulary. The Goethe Instituts invited schools, scheduled the workshops and provided a suitable venue for the workshops to happen.

In most of the cities, Native Scientists delivered, as agreed, 2 workshop on the same day. At times, communication with the local Goethe-Instituts and/or teachers was difficult to establish. In Oslo, Stockholm and Helsinki, the second workshop could not be filled with school students.

Overall, the school students as well as the scientists had a fun and fulfilling experience. Teachers as well as Goethe-Instituts showed interest in more workshops with Native Scientist. Therefore, Native Scientist is exploring the possibility of expanding their network of German scientists living and working abroad and train new coordinators to be able provide more workshops.

ACKNOWLEDGMENTS

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