



european
science
engagement
conference

vienna, austria
9-10 may 2019

Horizon Talks- 4th session: Thursday 10th May, 12:00 –1:30 pm

- ❖ Mind the Lab: A Powerful Tool on Bringing Science to the General Public!

Theodoros Anagnostopoulos

Keywords: General public, street science

According to various data sets, most science communication activities are usually attracting people with a pre-existing interest in science, thus failing to achieve their principal goal, i.e. bringing science to the general public. Therefore, a great challenge arises for science communicators: how can the general public be attracted?

To answer this challenge “Mind the Lab” (MTL) initiative was created. MTL is a STEM awareness raising campaign which takes place at metro, train and bus stations and aims to stimulate people’s interest in science during a short time interval. It addresses all citizens, no matter their age, educational and social background or interests. This way the general public can be actually engaged in a science communication experience through interactive exhibits, shows, stand up acts, and street science. MTL has so far been piloted successfully in Athens, Berlin, Edinburgh and Madrid.

- ❖ The Science Communication Starter Kit

Beatrice Lugger

Keywords:

Communication departments at research institutes and universities are often encouraged or required to involve their scientists in engagement activities. At the same time, scientists are often unaware of how professional communicators can support them, particularly if they are new to a research institute.

We developed a science communication starter kit for researchers. The purpose of the starter kit is to improve the interaction between communication department and scientists. Individual, modular cards present the communication department and its responsibilities, provide

We developed a science communication starter kit for researchers. The purpose of the starter kit is to improve the interaction between communication department and scientists. Individual, modular cards present the communication department and its responsibilities, provide communication tips and guidelines for scientists, and inform about local engagement activities and ways to participate.

In this talk, we present the science communication starter kit and explain how the information it contains, helps to foster relations between researchers and communication departments. The science communication starter kit will be made freely available as a white-label product.

❖ ESCOLAB-GOT AN IDEA! Engaging the Young

D. Escobar, M. Molins & A. Calderer

Keywords:

New approaches of public engagement are shifting from standard practices towards stimulating creativity and critical thinking, empowering citizens through the dissemination of knowledge, and engaging audiences at an earlier stage in the research process. In this context, how to connect youngsters to science and how should science connect with them? This is the aim of Escolab: to invite secondary school students to discover, think about and express their opinion about science development nowadays and the impact of science applications. EscoLab opens the doors of Catalonia's leading research centres and offers the opportunity to more than 11.000 students to gain first-hand experience of their research projects. And, after the visit, they're asked to participate in GOT AN IDEA! Think of the future you want, a contest that encourage them to adopt a creative attitude and think about doing real research and innovating. The winning ideas are sent to researchers and students can be guided by them on how could it be materialized.

❖ Sparkling science- A funding Programme Fostering Cooperation between Schools and Academia

Marika Cieslinski

Keywords:

The aim of this horizon talk is to outline and discuss lessons learned during ten years of research funding for projects bringing together researchers and pupils. The funding programme "Sparkling Science" (SPA) started in 2007 as an initiative by the Austrian Ministry of Education, Science and Research. In almost 300 research projects scientists worked on a par with pupils to answer current research questions, ranging from natural to social sciences, over humanities, arts and medicine. Thus, the motivation for setting up SPA was twofold: 1) to capture pupils' interest for science and innovation, 2) to foster scientific progress by involving young "non-experts".

However, this form of collaboration between young and old, or “experts” and “laypersons”, does not only hold opportunities for all involved. Challenges arise not only at an institutional level due to the interplay between the Austrian school system and academia, but also because of the fact, that most scientists were not used to work with pupils.

Advantages, difficulties and recommendations for the cooperation between pupils and academics will be presented in this horizon talk.

❖ Improving Problem-solving Skills through Play and Peer Teaching

Sheila Donegan & Cordula Weiss

Keywords: Problem solving, play and peer teaching, Waterford City

Problem solving skills are key to succeed in life. Problem solving includes creativity, communication, initiative, lateral, logical and strategic thinking. This project is a 6-week structured programme in which 16yr olds work with primary pupils on maths problems and logic puzzles.

The 16yr olds complete a 4-week problem solving module to develop their problem solving skills. They learn to explain the puzzles and logic games to 10-12yr olds and make physical models which they present at a Maths Fair at the end of the programme where the primary pupils work through the puzzles guided by their older peers.

Evaluation shows that the secondary students enjoy problem solving much more after the project (increase 17%), are more confident in problem solving (54%) and communication (48%), felt their problem solving skills had improved (42%) and enjoyed the teamwork with their class (70%) and the primary pupils (50%).

Primary pupils’ attitude towards maths and problem solving was more positive (increase 33%). The success of the project is illustrated in that all secondary schools in Waterford City are participating, and there are plans to extend the programme to other towns.