

Café Científico and Wake up with science. Really fun and interesting outreach activities

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Abstract

“Café Científico” is a series of informal discussions connecting research and society. This outreach activity allows people enjoy while engaging with cutting-edge researchers from University of Cantabria. In Santander, since July 2012, we have a meeting on the last Friday of the month, in the “Café de las Artes”, a special theatre at the city.

At the same time, we carry out the same activity only for children: “Wake up with Science”. Once in a month, usually the third Thursday of every month, at the University, we invite children to participate in a special “Café Científico” only for the youngest.

With this contribution we want to present a successful outreach activity, with two versions, adapted for participants aged. In any case, these activities always attract many people from Cantabria.

Keywords: Outreach, Science, General Public, Enjoy with science

1. Introduction

It is essential “to promote communication for the advancement of interdisciplinary materials research to improve the quality of life. Using outreach activities is possible to communicate the importance of science in society to the general public and promote science and technology to the next generation. In this way, Science Outreach disseminates the knowledge to a wider community through programmes and activities such as talks, lab visits, family workshops, in-school presentations, and documentary films among many others.

One of these activities is the “Scientific Cafe”, events that take place in popular sites open to everybody and that bring live conversation with scientist about a particular topic. The idea to organize “Café Científicos” in Cantabria appeared in 2012. Worried about the need to encourage our society into science, and promote their participation in outreach activities not in an academic environment, but more in

an informal one we began to think of organizing new activities. And “Café científico” was one of them.

Café Científico is a set of relaxed discussions about different topics of interest related to the research done at the UC. It tries to connect research with society. This outreach activity allows people to ask/discuss/comment with a researcher from UC.

It is carried out in an alternative theatre at the city, called ‘Café de las Artes’. The aim of this is to avoid the formalism of University environment which intimidates and interfere with the dialogue looked for in this activity. It is done every last Friday of the month during the academic year. Since its beginning, public has progressively increased and now we have even a group of fans that attend regularly. These activity has started with researchers from the University of Cantabria but the goal for the future, is bring researchers from other universities to discuss with our public.

At the same time, recently the similar activity has been started for children in school timetable: “Wake up with Science”. Once a month, usually the third

Thursday, at the University, children are invited to participate in a special “Breakfast Científico” only for the youngest.

With this contribution a successful outreach activity is presented in its two versions adapted for the participants ages, also the impact of it will be discussed.

2. Café Científico

Café Científico started in the late-20th century as an informal discussion about scientific subjects. They were never intended to be lectures. They provide insight into several issues of popular interest to the general public, and in turns provoke questions and provide answers. For that reason, the Cafés Científicos are all about accessibility to the latest news in science. They involve interaction between the public and experts in a given field at a café, a pub or a restaurant. Those who want to take part in a Café Científico, there is no need for them to have a science degree. They just need to have a deep-rooted desire to learn about a particular subject and obtained answers to any questions that are on their minds without any shame.

Cafés Científicos are not limited to one particular location, but take place across the world. They are hosted by various university, research institutes, as well as associations etc.

2.1. Objectives

Cafés Científicos allow:

- Connects the public to the fun and excitement of science at a leading research university. Shows aspect of the image most of the people have about science as something hard and boring.
- Shares the latest research and lets discuss scientific issues with general public.
- Cultivates an interest and appreciation of science in potential students young and old.
- Shows how the research-intensive university contributes to society and the big impact it has in our daily life that we are not aware of,
- Makes science education accessible and interactive for students, teachers, and the community

2.2. Main characteristics

- **Audience.** The Cafes Científicos are designed for the general public, everyone is welcome to attend. Cafe audiences are people with interested in science. Anyone can participate; speakers are there to be questioned and talk about their work at all levels.

- **Tickets.** There is an admission free: all Cafés are free of admission charges.

- **Subject.** Café Científicos are devoted to all issues that concern general audiences. The subjects can be timely - and timeless. .

Location: Cafes Científicos are hosted in a range of venues. Most are in bars or cafes, but some use bookshops, theatres or community spaces. Cafes Científicos are held regularly and take place in the evening

3. Cafés Científicos in Cantabria

In Cantabria, Café Científico is well-received by audience. Since July 2012, we have a meeting on the last Friday of the month, in the “Café de las Artes”, an alternative theatre at the city that covers different art proposals from theatre, circus, dance and now science. The Café Científicos start with a moderator, from the University of Cantabria, so far, who introduces the subject. with a short presentation (20/30 minutes) about what they know regarding the subject, the art of the state in the topic and raising some points up to discussion. They sometime use power point/images/videos to clarify the topic. This is followed by an hour or so of questions, answers and general discussion. Anyone can ask a question or make a comment,

The cafes had coverage a wide range of issues relating to science and technology. Since July 2012, cafes have covered almost every conceivable scientific topic:

- Particle Physics,
- The Big Bang
- Cosmology
- Astronomy
- Cancer
- Genetic
- Global warming and climatic change
- Diagnose
- ...

Indeed, we are welcoming to suggestions from the audience about the programmes.

Usually around 80 people participate in each Café Científico session, which can varied up or down depending on the time of the year and topic, some of

the topics bring more people and more lively discussion than others.

The Café Científico in Cantabria is free, we offer free coffee and cookies half an hour before each session to enhance the dialogue mode that we want to provoke once the speaker starts to talk. Cafés científicos are advertised through several medias: social network (facebook, twitter...), press release, web page, Cantabria cultural calendar, mailing list etc. The awareness campaign is designed to ensure optimum community impact.

In general, the activity works very well and we would like to give it a push reaching new people, specially attracting young people and bringing people from other institutions.

4. Wake up with science

Science is inclusive: everyone can engage with science in their daily lives. The impact of science affects all. From an early age, we interact with our environment, asking questions and seeking answers. This question-and-answer process lies at the heart of knowing and doing science. It is a way of knowing and thinking about the natural and physical components of the world in which we live.

The importance of science in our daily lives may not be obvious, yet we make science-based choices every day.

In this way and endorsed by the success of the “Café científico”, a new initiative from the Institute of Physics of Cantabria was proposed: “Wake up with Science”, to provide all students from elementary and secondary school with the opportunity to ask questions to the physics researchers. In short, it is a Café Científico adapted for children, with the goal to get children interested about science.

In this format, Science is well-received by children where they feel free to ask without any prejudice from teachers or classmates. Once a month, usually the third Thursday of every month, children are invited to participate in a special “Café Científico” where breakfast is provided. It is carried out in the “Tres Torres” building, situated at the University. This building is a special building oriented to the university students, and with social meeting rooms that invites the dialogue.

There have been 4 sessions, designed for 6 years to 15 years. More than 85 children participate in each Wake up with Science session.

This activity is free too. Moreover, when the discussion finishes, we offer them a breakfast (milk and cakes). On the other hand, until now, our cafés

only for children have covered a wide range of issues relating to physics: particle physics, colliders, cosmology, astronomy, telescope... Previously, materials and information about the specific topic is sent to the teachers so they are able to work with the students.

Children respond well to the activity. They are very participative, and they show that there is great interest in the theme. On the other hand, researchers are extremely careful doing the activity. They translate complex scientific findings in a simple but correct manner intended for children. Interestingly, the younger children display more interest in the activity than older one.

About the structure, the same structure than Café Científico one is used. Wake up with Science starts with the help of a moderator, who introduces the subject of scientific discussion. Following the introduction, expert speakers each give a short presentation (20/30 minutes) about what they know regarding the subject. It is meant, the speaker introduces the topic. They sometimes use power point/images/videos. This is followed by an hour or so of questions, answers and general discussion. Anyone can ask a question or make a comment, and we positively welcome those which begin.

Without a doubt, this is a successful learning activity, which gets to increase the children’s interest for Science.

5. Conclusions

It is obvious that, it is of paramount importance for all to get used to science. For this reason, at UC (University of Cantabria) / IFCA (Institute of Physics of Cantabria), many activities for general public are organized, covering practically every age, using different proposals and formats.

We are trying to show them that science (including all areas) is part of their daily lives and not only what people do in a lab, a library, etc. and it is not related to them. We try to teach them that basic research is important for the progress of the society and that they do, in fact, basic research when they play, explore, ask questions, etc.

Worried about the need to encourage the growth of science, and encourage the participation of general public in science outreach activities, in an informal meeting we began to think of organizing new activities. And “Café científico” was one of them.

In this work, two successful outreach activities are presented, with two versions, adapted for participants aged: Café Científico and Wake up with Science. In

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