

Emily
Dawson

What is Science Communication?

What do the TV show 'Bang Goes the Theory', the Eden Project in Cornwall and the physicist Professor Brian Cox have in common? They are all involved in Science Communication. Emily Dawson explains.

On one level Science Communication does what it says on the tin: it is about communicating science and building bridges between the people involved in scientific research and different groups of the public. But Science Communication is much more than just communicating science. Science Communication is involved in developing government science policies, understanding relationships between 'the public' and 'scientists', and creating science stories in the mass media, as well as exploring how people learn about and engage with science.



Dara O Briain testing out the University of South Wales' mind control robotic arm on his BBC Science Club programme. Television is a main source of science ideas once you have left school.



The Eden Project in Cornwall aims to educate visitors about science. It includes these large biomes that house plants from all over the world.

Where did Science Communication come from?

Science Communication has grown enormously over the last 40 years. The expansion of Science Communication in the UK was driven by a number of factors. These included the growth of research in science, engineering, technology and similar subjects, the increasingly central role of science in our lives, and concerns about whether most people understood enough about science.

This growth was also, in part, a response to some huge public relations disasters from the perspective of the scientific community and policy makers. These include the debates about genetically modified (GM) food, public anxiety over the MMR vaccine and concerns about the use of animals in research, to mention but three.



The MMR scare led to fewer children having the MMR (Measles, Mumps and Rubella) vaccination. As a result, the numbers of children with measles has risen. Could better communication of the science help reduce the likelihood of such scares?

Because of these very public, very controversial arguments about how science was used and affected people's lives, Science Communication began to focus on asking people about their views on science. This change, from 'telling' to 'asking', meant the public could be more involved in political decisions about what kinds of scientific research to fund and what kinds of science were considered too unethical, too dangerous or too scary.

Why is Science Communication important?

Think about the places where you find science. For most people, science is something they learn most about in school; after that, most of the science people see or hear about is in the mass media. In other words, science is something you do at school when you are young and is something you see on TV or read about in newspapers or online when you are older. If your job involves science you will become a specialist in that area, but probably will know no more about other areas of science than anyone else. But science plays an important and complicated role in our lives, so being able to understand, learn about, question and critique science is an important part of modern life.

Most people only spend a small part of their lives at school. This means that the science you learn there will probably not be enough to help you understand and contribute to the scientific debates of your life. From personal decisions about health care, which car to buy or whether it's ok to eat the chicken that has been out of the fridge all day, to bigger, societal decisions about military technology, online privacy or stem cell research, helping people to understand the science involved is crucial. Science Communication has an important role to play in helping people to learn about science, to understand science issues when they hit the news and to have a voice in debates about the roles of science in our lives.



The Natural History Museum in London is a very popular place to learn about the natural world.

Science Communication today

Today Science Communication is a broad field of activity and research, so people working in Science Communication do a huge range of different activities. Some work for the government and research councils, training scientists to communicate different aspects of their research. Others work for science centres and spend their days doing amazing experiments in front of crowds of visitors. Others still do social research to understand how the public think about scientific issues. So whether you want to be the next Brian Cox, wowing TV audiences with science, or you want to explore how science works in our society, Science Communication is an important subject.



Prof. Brian Cox meets students at Redbridge College in Romford, Essex (www.redbridge-college.ac.uk).

Dr Emily Dawson is a Lecturer at King's College London, currently launching the first BSc course in Science Engagement and Communication in the UK

Look here!

For information on the new undergraduate degree in Science Communication see:
<http://tinyurl.com/p5dwq29>

Read six case studies of people who are making careers in Science Communication – see pages 6-8.