



## Communicating Science to Society

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“Nothing in science has any value to society if it is not communicated.” So goes the 1952 quote from Anne Roe, the noted twentieth century American psychologist and writer. She went on to say that “scientists are beginning to learn their social obligations”, and now over 60 years later there is certainly evidence to support her assertions. As scientists, by communicating our research to the general public we not only better inform the tax payer where their money is being spent, but are also able to help put into context the topical environmental challenges and issues that society faces, as well as inspiring a whole new generation of future scientists. This process of communication is very much a two-way street; by presenting our work to people outside of our usual spheres of contemporaries, we expose ourselves to alternative thoughts and insights that can inspire us, as scientists, to take another look at our research from angles that we had never before considered.

This work presents the results and experiences from a number of public engagement and outreach activities across the UK, in which geoscientists engaged and interacted with members of the general public. These include the design and implementation of Raspberry Pi based outreach activities for several hundred high school students; the process of running a successful podcast (<http://thebarometer.podbean.com>); hosting and participating in science events for thousands of members of the general public (e.g. <http://www.manchestersciencefestival.com> and <http://sse.royalsociety.org/2013>); and creating a citizen science activity that involved primary school children from across the UK.

In communicating their research it is imperative that scientists interact with their audience in an effective and engaging manner, whether in an international conference, a classroom, or indeed down the pub. This work also presents a discussion of how these skills can be developed at an early stage in the careers of a research scientist, presenting the results and methodology of a groundbreaking lecture series at the University of Manchester, in which undergraduate and postgraduate students were taught how to be more effective communicators using methods derived from theatrical technique.

Carl Sagan told us, “Science is an absolutely essential tool for any society. And if the scientists will not bring this about, who will?” It is our job to engage with the general public to ensure that this is the case.