TANGO

1st Communication and Outreach Workshop

(Deutsches Museum, 23.09.2013)
Dos and Don‘ts of Science Communication
Brief History of Science Communication

It was not until the invention of the printing press in the 15th century that a widespread communication of insights into natural phenomena became possible. Prior to this, the transfer of knowledge had been restricted to word of mouth and those few individuals who had access to the limited number of books that existed. The possibility of spreading ideas and findings in greater number in printed books was the first step that enabled the development of the scientific methodology we know today. Yet it would take well over a century for the actors in this field to take the next step in communicating their experiments and results by convening on a peer-to-peer level in organised academies. This was a vital step in the creation of social roles which correspond with our concept of a modern scientist. Known as 'natural philosophers' until the late 19th century, these men initially only circulated their knowledge within their academic circles, using Latin as the primary language for written communication.

Formalised communication to a more general public did not commence until the year 1799 with the founding of the Royal Institution of Great Britain. The next 50 years saw many advances in involving the public, notably Michael Faraday’s Christmas Lectures or the publication of the first popular science magazine Scientific American. One of the most influential events in the history and development of science communication was the publication of Darwin's "On the Origin of Species" in 1859. This sparked a public debate which has lasted to this day. One of the results of this is that a wide public started demanding communication and dialogue with the scientific community.
Practical Communication Skills – **Dos part 1**

- introduce yourself
- be sure that everyone can hear and see you
- use loud and clear voice
- speak slowly and use breaks
Practical Communication Skills – **Dos part 2**

- keep eye contact with all the group

- explain things in lay terms

- refer to daily life, practical and common examples

- keep your message simple, the topic focused
Practical Communication Skills – Dos part 3

• give some basic rules, if necessary

• emphasise why you are a researcher, show emotion, passion

• use demonstrations, animations, cartoons
Practical Communication Skills – **Dos part 3**

**Johannes Kepler's Uphill Battle**

...so you see the orbit of a planet is elliptical.

What's an orbit?

What's a planet?

What's elliptical?
Practical Communication Skills – Dos part 4

- accept metaphors or explanations using “incorrect” words if they explain the phenomena “correctly”

- listen to people and convey that their views matter, try to use what they say in your explanations

- learn to say “I don’t know”
Practical Communication Skills – Don‘ts part 1

• don’t hide, stay on a side or far from the group

• don’t talk over peoples’ heads

• don’t cross arms or put hands in the pockets

• avoid the use of scientific terms, acronyms etc.
Practical Communication Skills – Don’ts part 2

• don’t give a lesson (engage visitors, ask opinions)

• don’t try to convert people to your point of view

• don’t expect audience to read large amounts of text

• don’t take too much time
...and so I will end!

Thank-you!

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