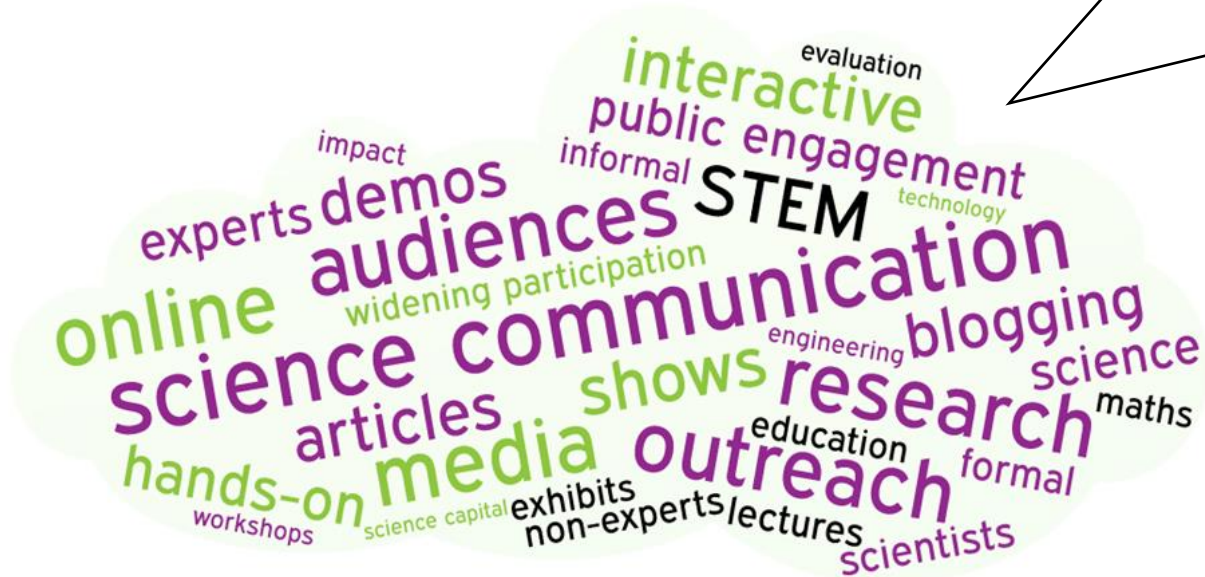


An Introduction to Science Communication:

Translating Your Research for a Non-Specialist Audience

Dr Hannah McGivern



Intended Learning Outcomes (ILOs)

○What?

- Define what we mean by science communication

○Why?

- Explain why science communication is important for both our CPD and the public

○How?

- List the different types of science communication and ways in which we can get involved
- List the skills that we can develop to become successful science communicators and incorporate science communication into our roles

What is science communication?

Describes measures to disseminate scientific information, research, ideas or breakthroughs to a non-specialist audience in an accessible and understandable way



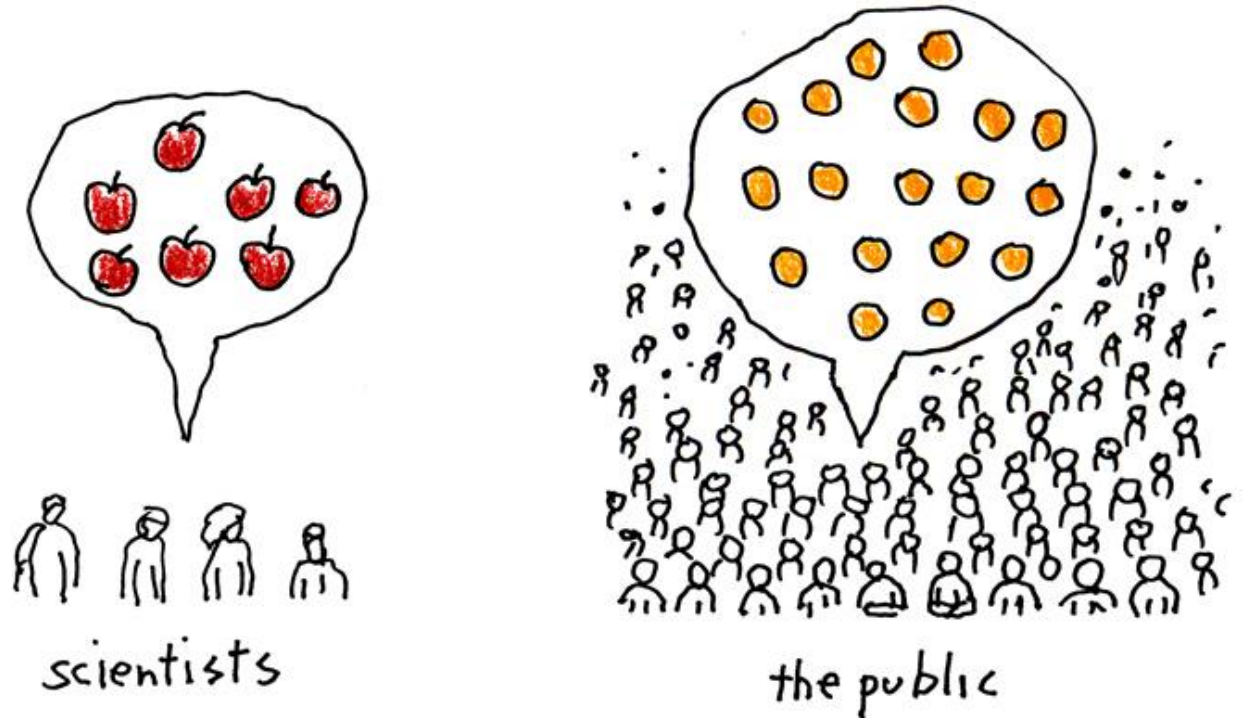
Why communicate our science?

- Public Awareness
 - Science and health literacy
 - Trust in scientific research
 - Trust between patient and caregiver
- Public Engagement / Patient & Public Involvement (PPI)
 - Recruitment to clinical trials
- Political and funding support
 - Communicate findings to stakeholders
- Establishing partnerships / shared agendas
 - Partner with charitable organisations to ensure research aligns with patient needs
 - Ensuring the patient voice is heard
 - Develop research projects with charities from the start

Developing Skillset

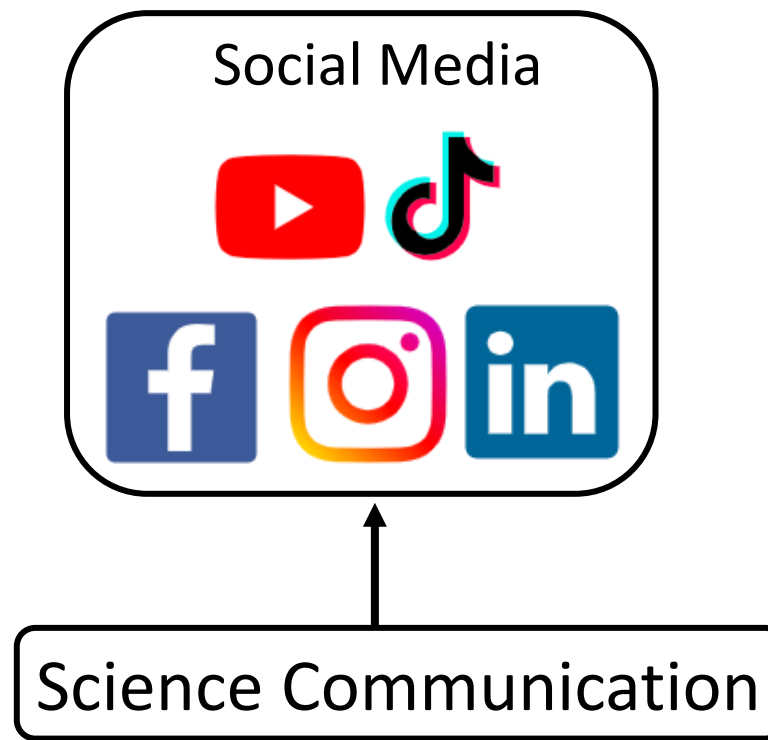
- Communicate complex, scientific information accessibly
- Verbal communication
- Presenting in different media
- Co-ordination & organisation
- Management & leadership
- Proactivity & tenacity
- Willingness to learn new skills
- Channelling enthusiasm and passion for your subject

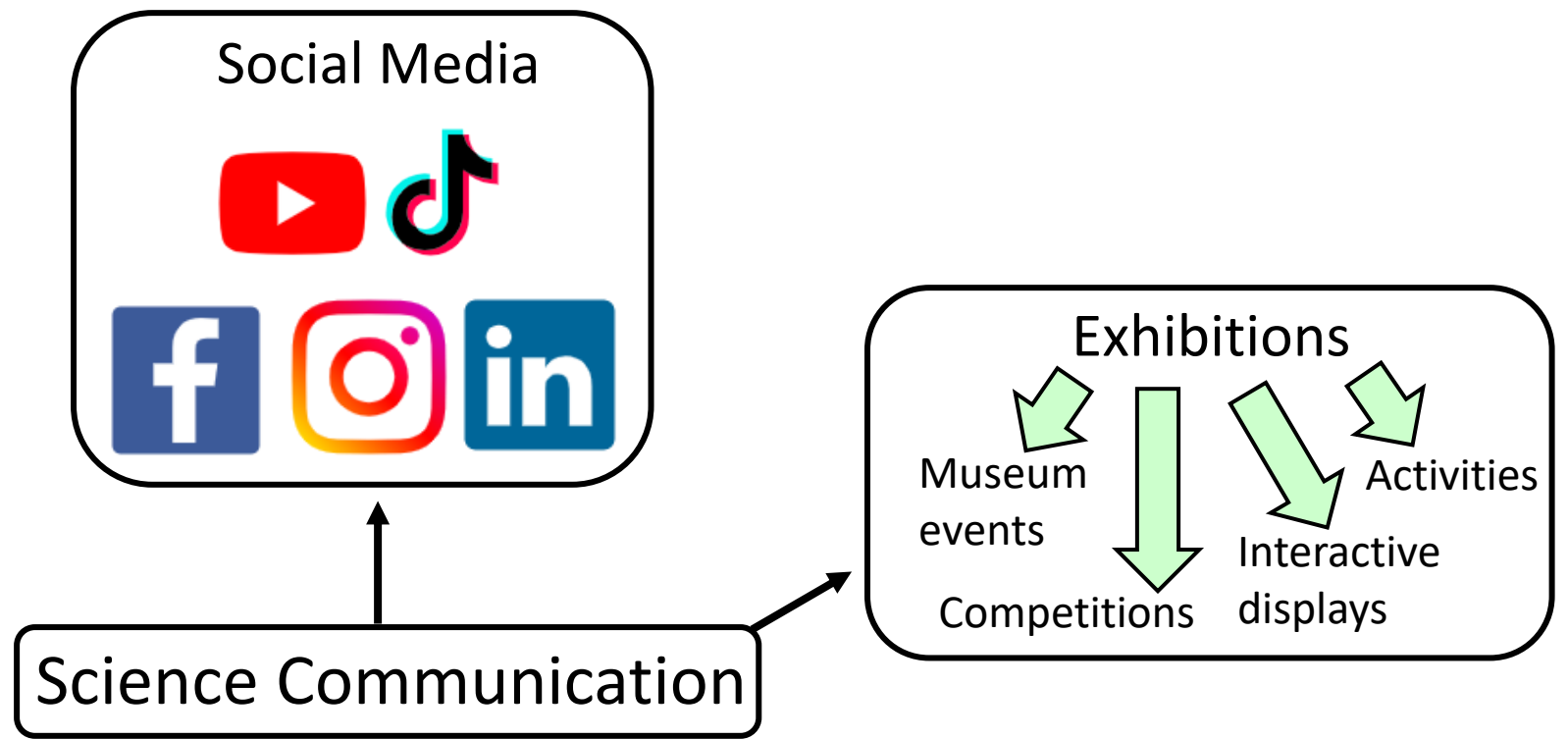
Science communication



Audience

- General public
 - Age groups
 - Community groups
 - Patients / lay committee members
 - Patient families
- Peers / Colleagues / Other scientists or healthcare professionals
 - Nationally
 - Internationally
- Policy makers
- Stakeholders





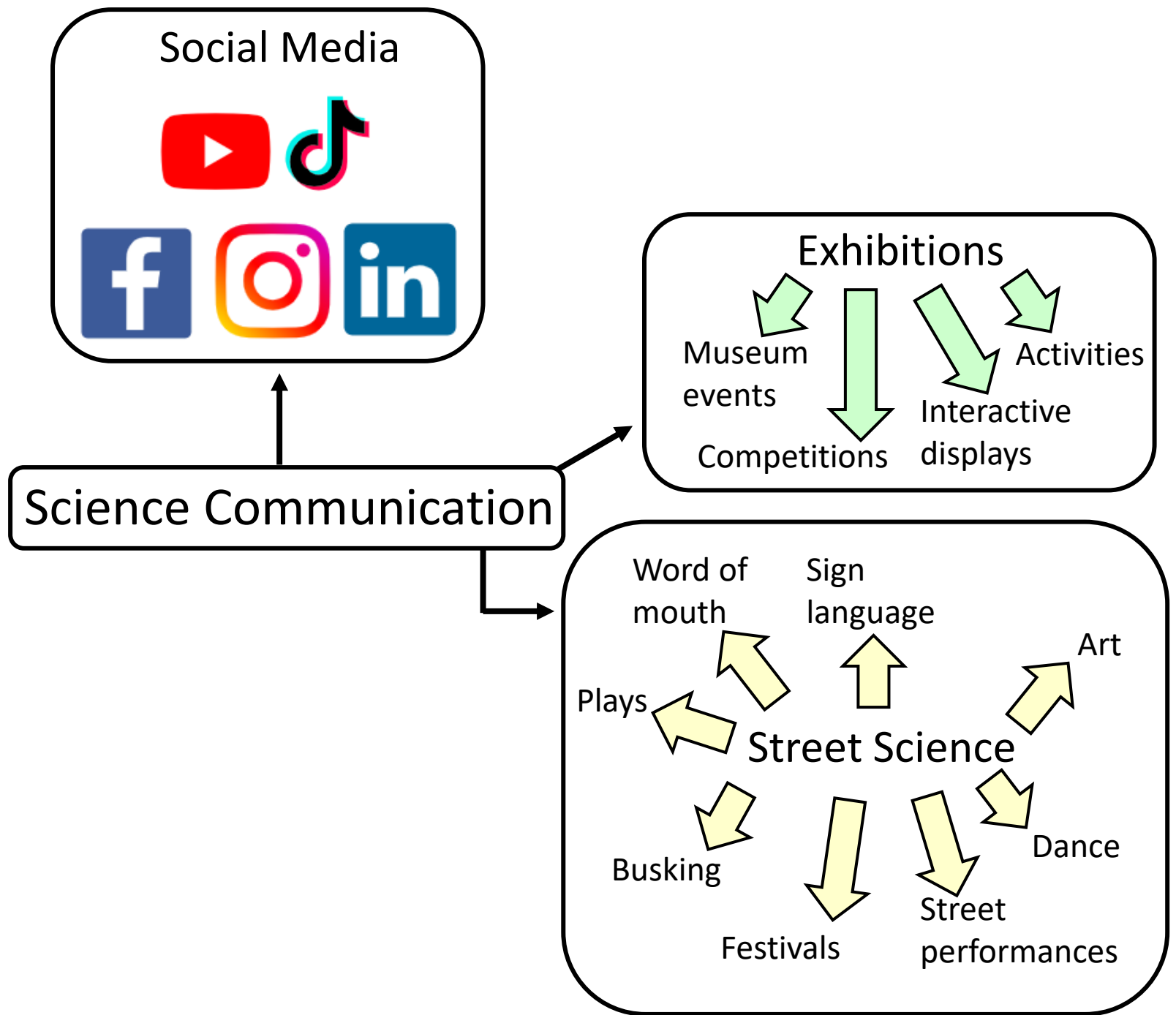
Exhibitions



Three Minute Thesis Competition



['I feel it in my bones!'](#)

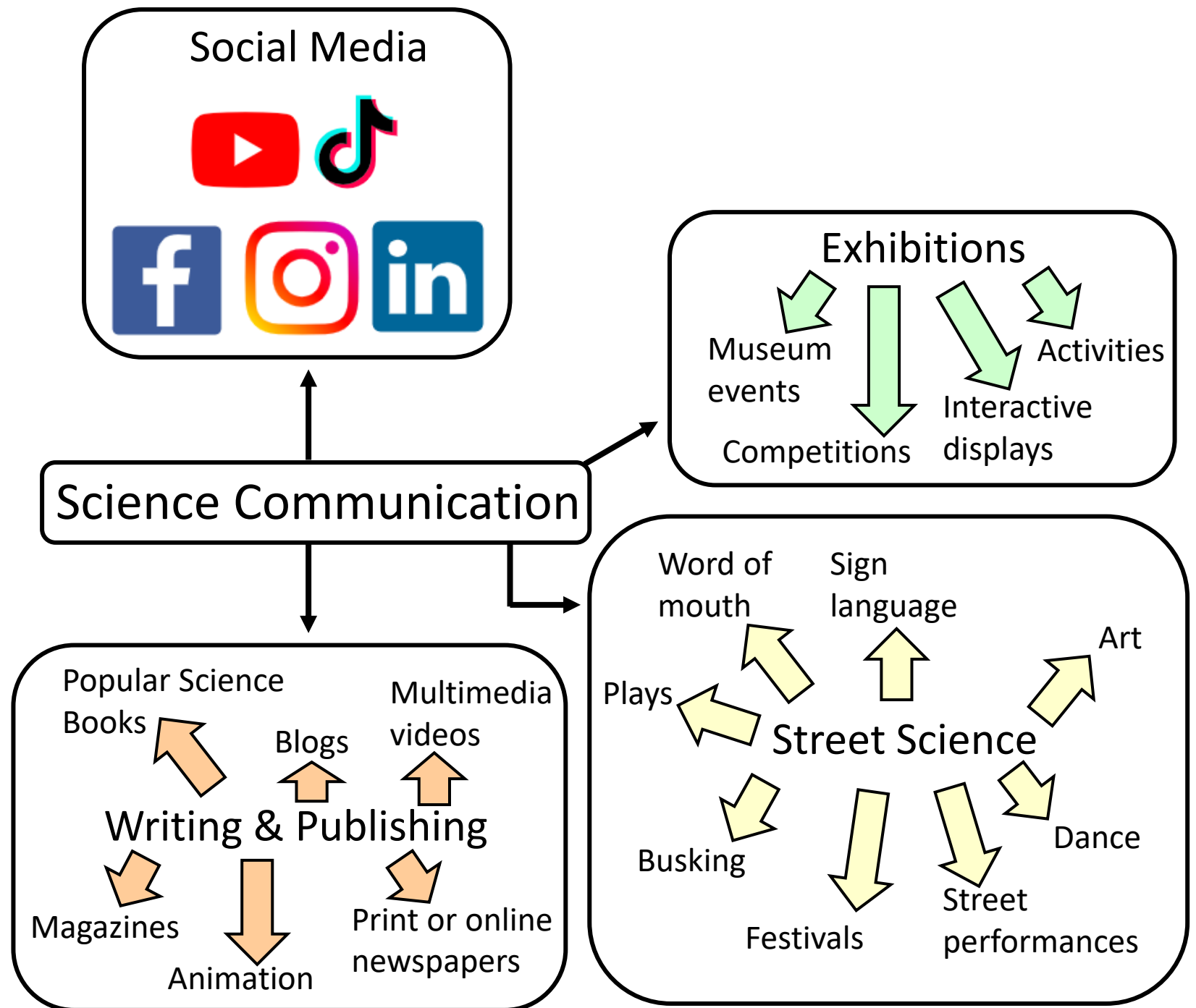


Street Science



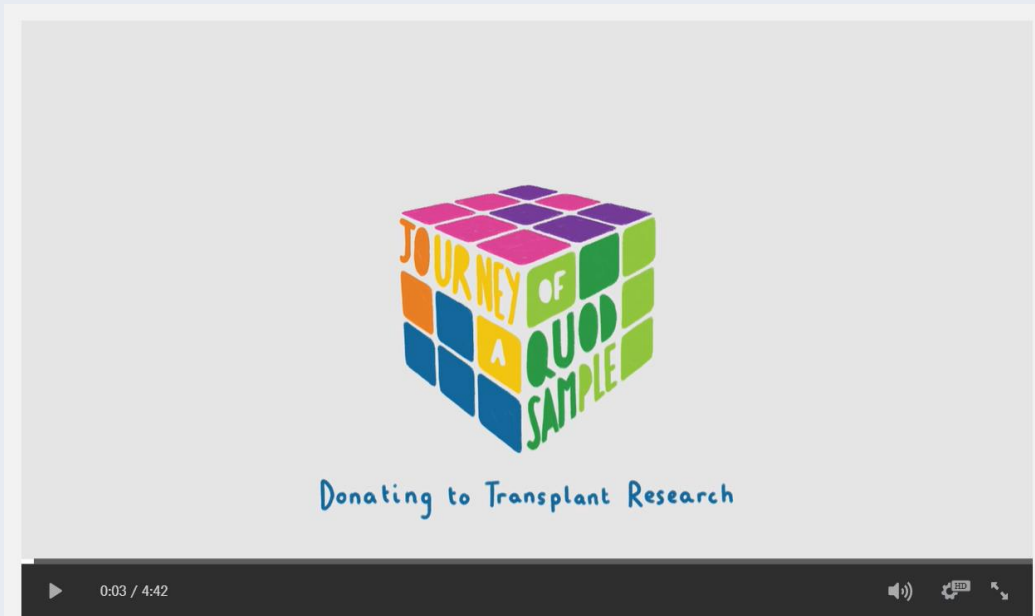
Street Science





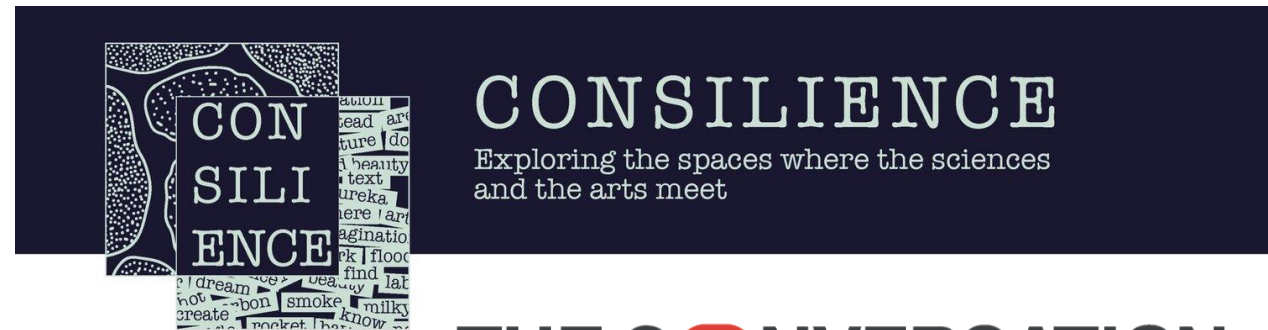
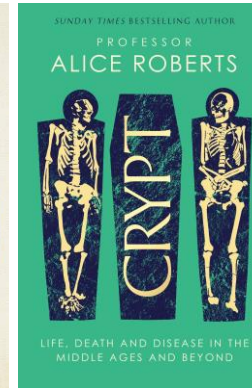
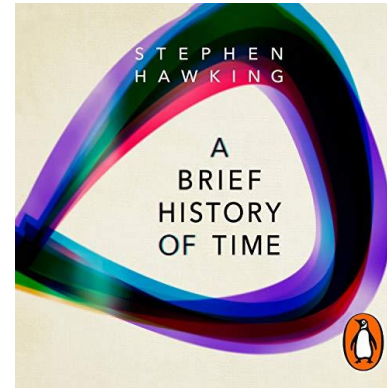
Science Writing & Publishing

'Journey of a QUOD Sample: Donating to Transplant Research' Video



[PCER Fund](#)

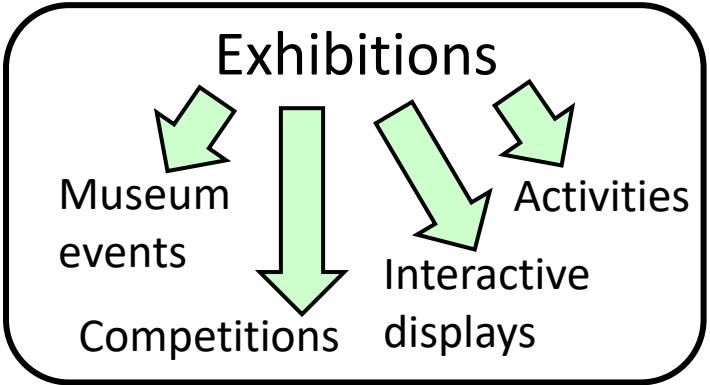
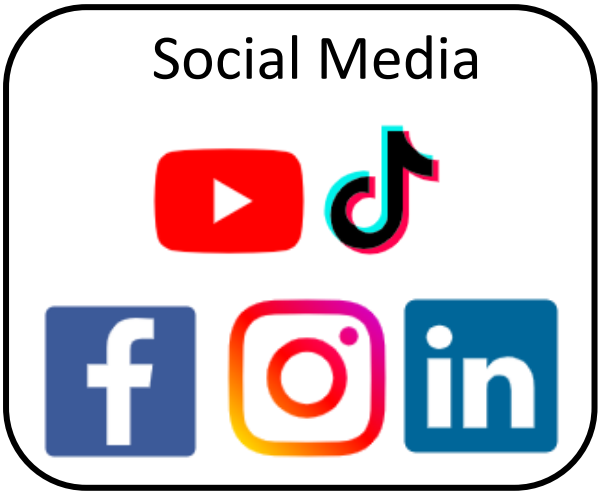
[Public Partnership Groups](#)



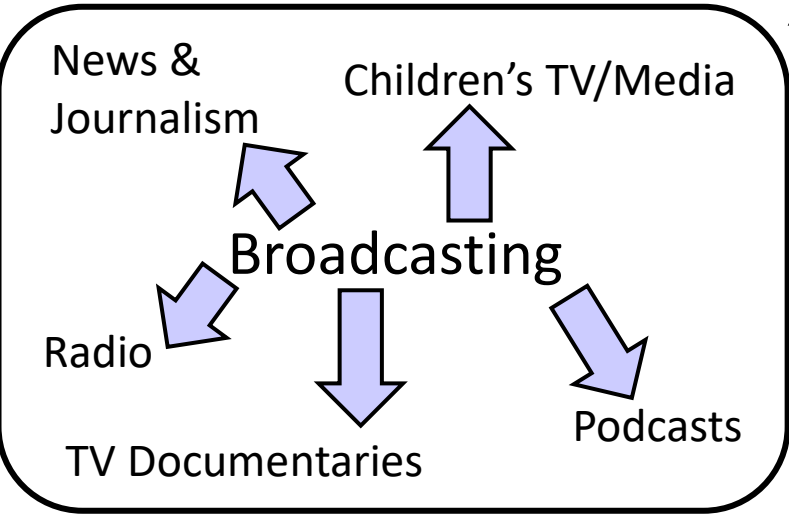
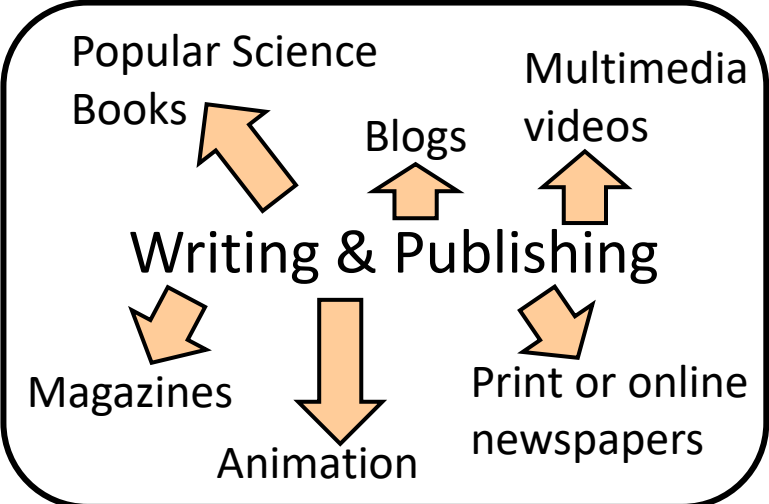
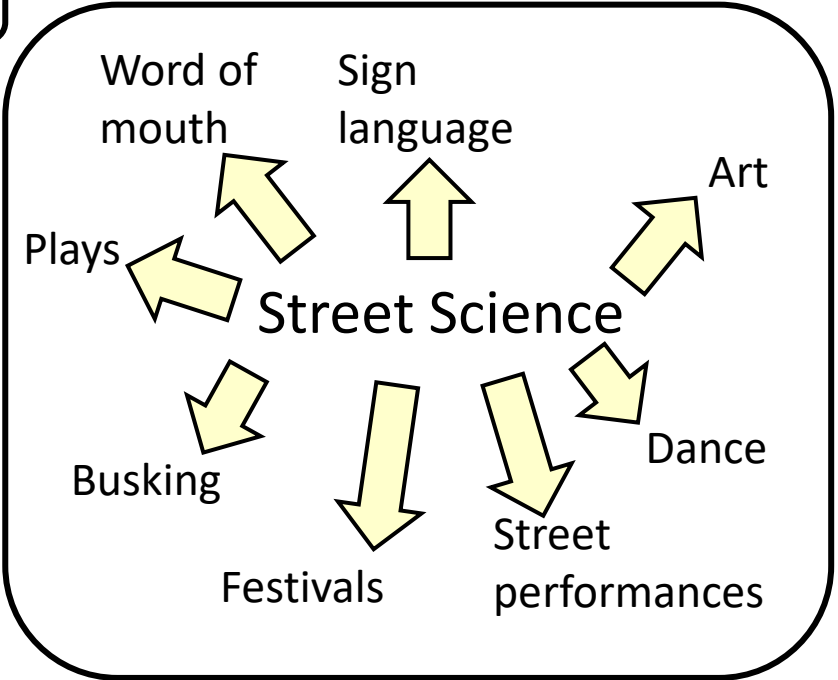
the Oxford Scientist

Top Tips for Writing

- Write in bullet points the key plot points of your story
 - Short, catchy, entertaining **title**
 - **Beginning** (context/background/introduction)
 - **Middle** (problem that you are trying to solve)
 - **End** (what happened and where do you go from here)
- Remove technical jargon unless it can be explained clearly and concisely
- Be creative
- Remember your audience!

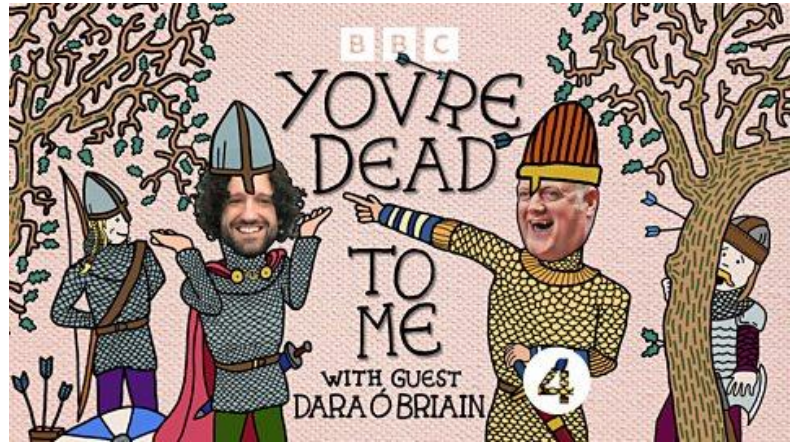


Science Communication

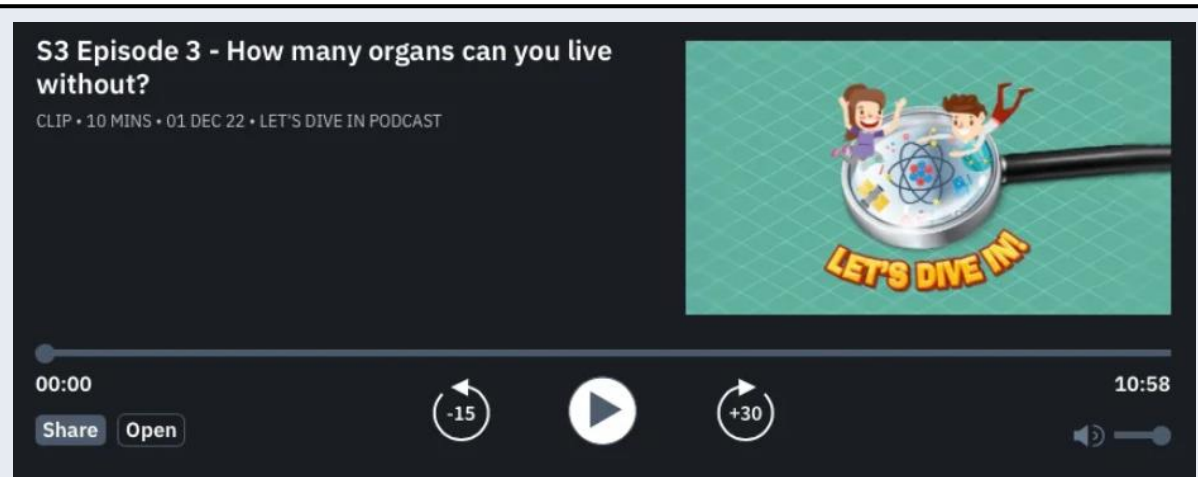


Adapted from image by Claire Fearon

Broadcasting



Broadcasting - Podcasts



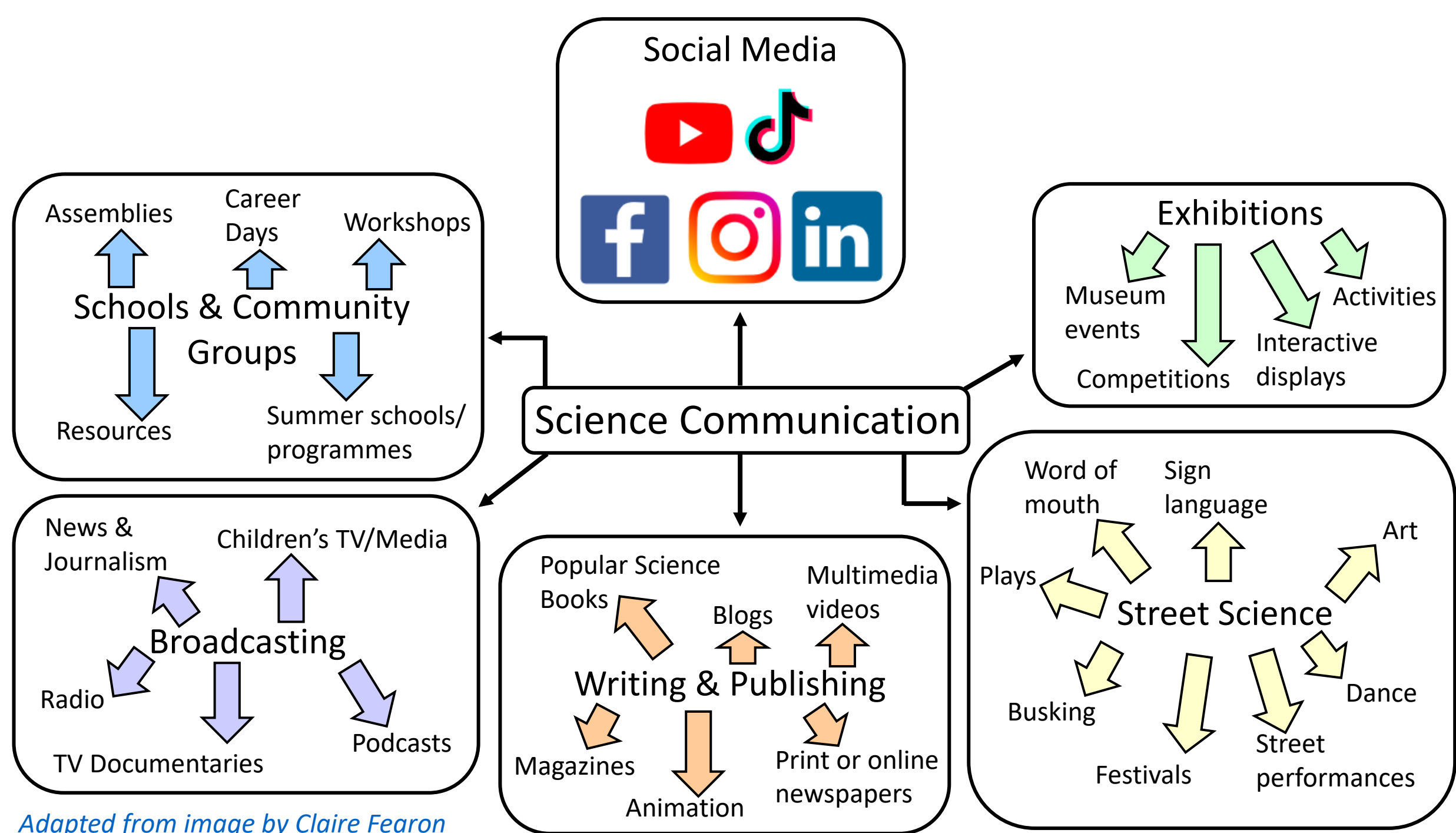
Presenter – what questions would you ask?
What do you think the audience is most interested in hearing about?

Scientist – what information are you going to communicate to the public? How will you word your response(s)?



Top Tips for Presenting

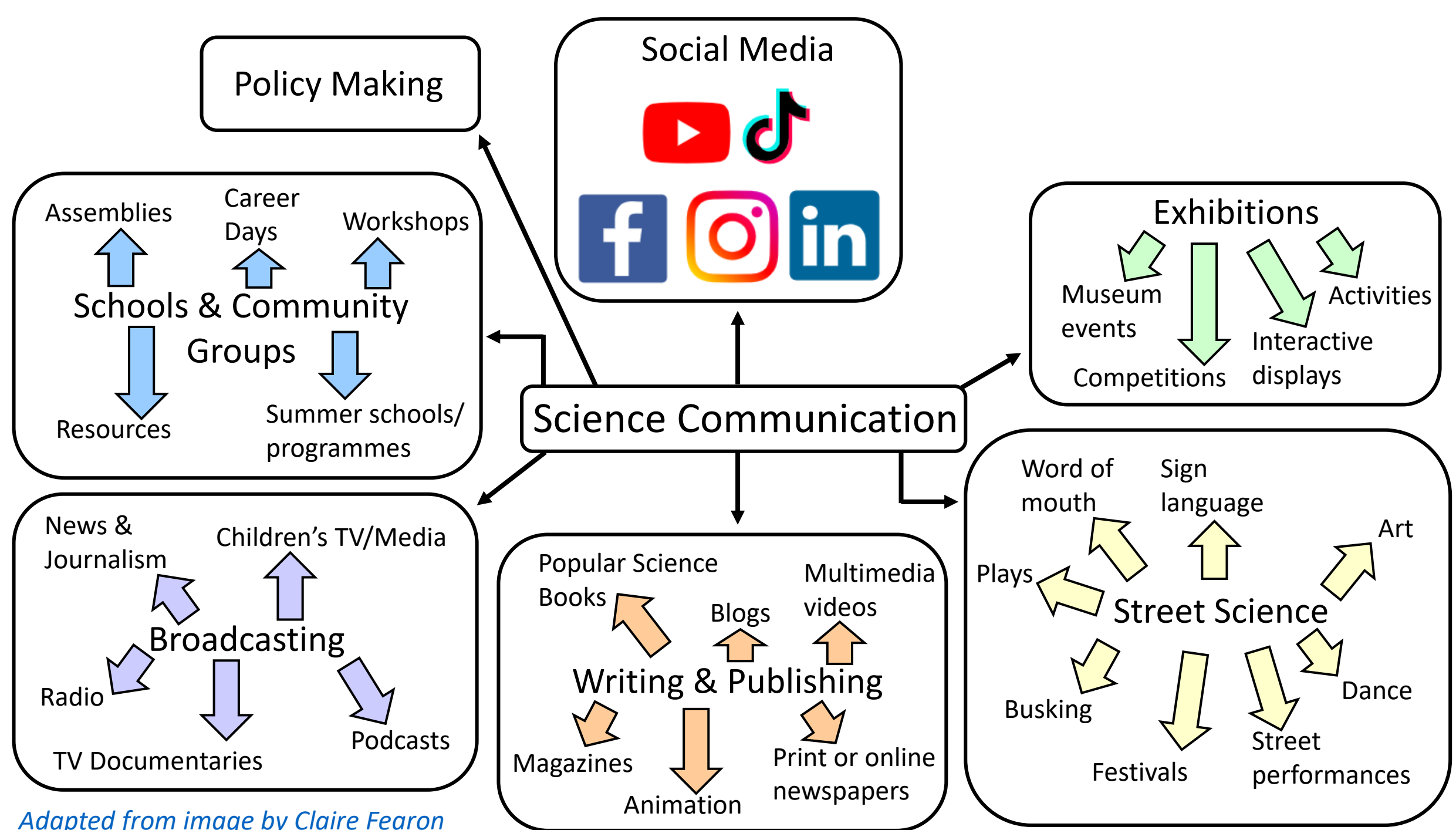
- Make eye contact
- Hand gestures and posture
- Prompt cards and notes
- Projection
- Interact with the audience
 - Direct
 - Indirect
- 'Practice makes perfect'
- Tell a good story!



Adapted from image by Claire Fearon

Schools & Community Groups





Adapted from image by Claire Fearon

Resources

- [Animate Your Science](#)
- [Oxford Sparks](#)
- [Science Oxford](#)
- [Oxford Medical Illustration](#)

More Examples

- [I'm a Scientist](#)
- [I'm an Engineer](#)
- [The Naked Scientists](#)
- [A Short Scientist](#)

Any questions?

hcl-enquiries@bodleian.ox.ac.uk



“Not only is it important to ask questions and find the answers, as a scientist I felt obligated to communicate with the world what we were learning”

– Stephen Hawking

References

- [Social Media Icon Images](#)
- [Image by Clare Fearon](#)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10154515/>
- <https://acmedsci.ac.uk/more/news/top-tips-for-communicating-science-effectively>
- <https://libguides.ncl.ac.uk/c.php?g=671323&p=4767450>
- <https://libguides.ncl.ac.uk/c.php?g=671323&p=4767451>
- <https://www.degruyter.com/document/doi/10.7208/9780226316635/html>
- <https://sites.rowan.edu/sgs/docs/3mt-handouts/translating-your-scientific-writing-for-a-public-audience.pdf>
- <https://www.oxfordsparks.ox.ac.uk/>
- <https://guides.library.upenn.edu/c.php?g=490107>