Science Communication Handbook

Based on Kaskas Media’s Science Communication Training Day organized by the Northern Dimension Think Tank Action on 12th of June 2019 at Aalto University
This handbook will provide you with principles of effective science communication. The handbook includes practical tools and examples that will help you to plan communication and interaction to support your research projects goals.

- **Stakeholder communication**
  - Practise: identify your stakeholders

- **Targeted key messages**
  - Example: modified key messages

- **Policy brief writing**
  - Practise: Making a concept for your own policy brief

This handbook is based on Kaskas Media’s Science Communication training day materials. The training was organized on 12th of June 2019 in Aalto University.
Make an impact with science communication

In dealing with **today's complex societal problems**, policymakers increasingly face the problem of deciding what evidence they should rely on. Policymakers are often required to make important decisions with very limited time.

Researchers and scientists can provide decision makers with **in-depth knowledge and unique understanding**. There is a growing need for research-based information.

Science communication is about making sure that the need for research-based information is met in a way that creates something valuable. **Well-planned science communication** is deeply needed in society.

In order to get researcher's voice heard in decision-making, messages need to be formed in a way that the general audience can understand them.

Successful communication rarely happens by chance. Effective communication requires planning and co-operation within the research group.
Identify stakeholders
5 things to remember about stakeholder communication

1. Get to know your stakeholders. You will understand better what kind of communication is effective and you will learn something new.

2. Stakeholders can be divided to the positively engaged faith-holders, the negatively engaged hate-holders and fake-holders. Keep all of them in mind but use most of your energy on communicating to the positively engaged stakeholders.

3. One-way communication is not enough. It is not easy to educate people because all new information is interpreted through our own worldview and beliefs. Active dialogue is the key.

4. Find out what is going on in the decision-making processes. If you want to influence on decision-making with your research, it is essential to know what kind of policies are being prepared and who is preparing them.

5. Create a win-win situation for your stakeholders. Motivate and inspire your stakeholders to interact with you and create relationships that can help you to reach your goals.
Practise: 5 questions to identify your stakeholders

Make a list of all the organizations, groups, companies and officials that relate to your research topic. Answering these questions will help you:

1. Who does this research project need as a partner or mentor?
2. Who needs the information or knowledge of this research project?
3. Who cares?
4. Who should care?
5. Who talks about the topic in media?

Place your stakeholders on the figure on the next page. Place them by the stakeholder’s relevance to the research project and by the stakeholder’s interest towards the research subject.

Analyzing your stakeholders will help you to plan communication that is effective and interesting for each important stakeholder group.
Identify and prioritize your stakeholders

Stakeholder’s **relevance** to the research project

Stakeholder’s **interest** towards the research subject
Identify and prioritize your stakeholders

Think hard how this stakeholder group could benefit from collaborating or communicating with you.

Check every once in a while what is going on with the stakeholder group and react if needed.

Build strong ties to this stakeholder group already in the beginning of the project.

Communicate actively about your project’s progress and results. Your research topic is a relevant discussion theme in this group.

Stakeholder’s relevance to the research project

Stakeholder’s interest towards the research subject
Form key messages
5 things to remember about key messages

1. Before you start writing your policy brief/poster/blog post/pitch, crystallize your key message. It is the one thing you want your stakeholder to remember from your conversation, paper or presentation.

2. Key message is a concise, memorable and understandable description of your most important goal or result. It can be as short as one sentence.

3. Form the key message together with your colleague if she/he is working in the same project as you. This ensures that you are communicating with an unified message and you reach higher impact.

4. Once you have formed your key message, it can be easily modified according to each stakeholder group and communications channel.

5. Each stakeholder has a very different point of view and interest to your research. Take this into account!
5 questions your key message should answer

1. What do you or what does your research group do?
2. Why is it important and what makes your research unique? In other words: why should your stakeholder care?
3. How is it connected to wider societal issues?
4. What are your most important research results and their effect on society?
5. How the change you wish to create is carried out?
Example: modified key messages

**Key message:** Our research project aims at reducing the environmental hazards related to the life cycle of pharmaceuticals.

**Stakeholder**
- Program Director from the Ministry of Environment, Finland
- R&D Director from Bayer Pharmaceuticals

**What the stakeholder finds interesting in your research?**
- What are the environmental hazards and how to reduce them, concrete solutions and policy recommendations
- What industry needs to do to reduce environmental hazards, new ideas for product development, a chance to collaborate

**What do you want to say to the stakeholder and how?**
- Policy brief: The environmental impacts of pharmaceuticals are a growing global problem. Environmental emissions of pharmaceuticals need to be regulated.
- Vision workshop or one-to-one meeting: We are changing the way pharmaceuticals are produced. This is how you can be part of this change.
Write a policy brief
5 things to remember about policy briefs

1. **Writing a policy brief is a choice.** Choose to write a policy brief when you want to influence on decision making and you can give policy recommendations based on your research. You are writing it because you want to change something in the world or in the society.

2. **Focus on one topic only.** Give the reader just enough information so that they can make up their minds based on that information. If you have many topics to address, write more policy briefs.

3. **Recommendations are the most important part of your policy brief.** Take some time to make them clear, well-argued and concrete.

4. **Make your policy brief easy and pleasant to read.** Take the knowledge level of your reader into account. Avoid long sentences, scientific jargon, difficult words and unnecessary abbreviations.

5. **Focus on results, not the methods.** Your reader wants to know the facts based on science and has very little interest in how you achieved them.
5 practical tips for writing a policy brief

1. **The headline of your policy brief needs to catch the eye of your reader.** Use relevant keywords, innovative phrases or interesting questions to stir up attention. Avoid difficult words and any abbreviations. Add an active verb.

2. **Start with a brief summary.** Include your key message in the first 2–3 sentences. Explain where the information of your policy brief is needed. Relate to the big picture.

3. **Place your recommendations on the first page.** Start each recommendation with an active verb (starting/should start > start).

4. **In the main body text, use short sentences, short paragraphs and plenty of subheadings.** Use as many as one subheading in 2–4 paragraphs.

5. **Finally, do a jargon scan.** Ask a friend who works in an entirely different field to read through your text and point out all the words they do not understand.
Practise: Planning your policy brief (1 / 5)

Fill in the concept paper before starting to write your policy paper. Thinking through the main questions that need to be answered will help you to write a better policy brief with less effort.

**Topic:** Policy brief concentrates in one topic only. Narrowing down your topic helps you to give well-suited recommendations to a specific question. (The topic of your policy brief IS NOT the same as the topic of your research): __________________________
_______________________________________________________________________________________________________
_______________________________________________________________________________________________________

**Your goals:** What is the social demand or a social question that your research is answering to? Are you looking for a change in society? What kind of change and why? _______________________________________________________________________
_______________________________________________________________________________________________________
_______________________________________________________________________________________________________

**Target group:** What is your target group? Make a list of max. three groups in priority order. Who specifically are you targeting your policy brief to? What are they interested in? What is their perspective on a topic in question? Keep your target group as narrow as possible. (Answer on next page.)
Practise: Planning your policy brief (2 / 5)

<table>
<thead>
<tr>
<th>Your target group</th>
<th>What are they interested in</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
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</tbody>
</table>

**Headline:** 

**Sub-headline:** 

**The main concepts or terms:** Explain your most important concepts right on the first page of your policy brief. This is to make sure your reader understands your recommendations.

1. 

2. 

3. 
Practise: Planning your policy brief (3 / 5)

Policy recommendations or key messages: What is your key message? A good policy recommendation is clearly formulated and leaves no room for interpretation. Give your recommendations in the form of an argument. Make them so concrete that they are easy to grab on to. Avoid being too vague. Explain with research findings.

1. 

2. 

3. 

4. 

Visual elements:

1. Are there any visual materials available about your topic? What?

2. Do you need to produce graphics or charts for your policy brief? What essential information can you present in visual form?
Practise: Planning your policy brief (4 / 5)

The time of publishing and distribution:

Recognise any current decision-making processes, seminars, discussions and summits related to your topic. Choose the most important ones and list them in chronological order.

1. _________________________________________________________________
2. _________________________________________________________________
3. _________________________________________________________________
4. _________________________________________________________________
Practise: Planning your policy brief (5 / 5)

When will you publish your policy brief? Why then?

How can you make sure that your target groups read your policy brief? What channels can you use to reach them?

Are there any stakeholders that could help you with distributing the policy brief and communicating about it?
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Kaskas Media

Kaskas Media is a communications agency specialized in science and expert communication.

We work with researchers and experts in all fields to help them communicate their work to the world in a powerful way.

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