Introduction about growth of interest in science policy and communication in recent years.

In policymaking, your audience is the politician, policy makers, and their aides or staff. If you want to engage Congress, understand that members and staffers shoulder a tremendous workload and are under intense time pressures. (Working with Congress, 45) Politicians must make many decisions and usually with partial information. They turn to trusted sources for advice.

At times I will speak specifically about Congress, but keep in mind that many of the points that I make apply to Executive Branch agencies as well as local and state politicians.
To be effective you need to pitch your message to your audience. Learn about your audience so that you can speak to their concerns and interests. If you’re speaking with a member of Congress, learn about that Congressperson’s concerns and responsibilities. Make what you say resonate with him/her. Research what they believe or have said / voted on the topic that you are going to be discussing.

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“Communication causes change. In this sense, to communicate successfully with anyone usually begins with knowing what you want to accomplish, learning about the person or persons you intend to communicate with, and discovering how they currently view what you wish to communicate about. Sometimes it’s unnecessary to ask the individual or group directly about these matters, if indirect and reliable sources of information about them and their views exist.” (from Cone’s Hold that Thought!)
If you are speaking to a large group, don’t try to speak to everyone. Choose your audience among the various people. This is your target audience.

“In Congress, there is no center or focal point. No advice can be directed toward Congress in totality. ...Individual members of both the House and Senate can be informed and counseled by frequent contact.” (Working with Congress, 45)

Usually when reaching out to policy makers, you have a particular target in mind. You can rather easily find information in the public record about that politician’s concerns and target your message to that individual.
If you are targeting several politicians, then you may wish to cater your message to the group you want to reach whether that’s based in political party, or Congressional committee.

In addition to who is your target audience, you also want to decide what you want your target audience to walk away thinking
- i.e. what do you want them to know, believe, or do?
- Use this to prepare your main message.
- Have evidence to prove your assertions. This will give your audience “reasons to believe” you (Ninja Comm)
Choose your interaction

Figure out how best to reach them. This will dictate not only who you’ll target and what you’ll say but also **what methods you use to communicate**

You will probably need to use multiple modes to communicate one message.
- Members of Congress and their staffers are bombarded with hundreds of messages daily received through meetings, phone calls, and emails.
- Congress received more than 201 million messages in 2004, a 4-fold increase from 1995.
  That number increased to 300 million in 2008.

Also, consider that “Communication is best understood as a process, and during the process all parties are trying to influence the understanding of others, while weighing or framing information with reference to themselves and their interests.” (Cone’s *Hold that Thought!*; this point is related to targeting your message).

So you want to consider your avenues for interacting with Congress and other policymakers. (More on this soon.)
- Meetings
- Written Correspondence (emails, letters)
- Telephone
- Hearings
- Responding to request for information

Also, you may consider whether you will act alone or as part of an organized group.
Use good practices

Whatever avenue you choose, use good practices: such as brevity, clarity, and courtesy.

- **Brevity**: They are busy and bombarded with information. You need to be concise when presenting information.
- **Clarity**: To have your message heard, clearly explain your points in a logical manner. The structure in which you present information matters.
- **Courtesy**: Be respectful to everyone. Do not underestimate anyone’s influence. You don’t know who has the ear and trust of whom.

In science communication literature there are two types of communication.  
**Two-way Communication** – conversations. This is a preferred mode of communication.  
**One-way Communication** – telling others what you know.
- A facet of this has been labeled the deficit model and it has come under criticism in recent years.
- **Deficit (or two-stage) model**: You have knowledge and once others know what you know they will make the right decisions.
- So what you need to do is (1) produce new knowledge and then (2) communicate it in laypeople’s terms; dumb it down
- It’s called the deficit model because it assumes that the audience is deficient in knowledge and after this void is filled then they will make better choices.
- This is a top-down process.
Why it doesn’t work: It fails to understand the needs and concerns of the audience. It fails to take into account the degree to which science can inform decision making on a particular political topic.

These are the next 2 topics: (1) understanding your audience – the politician and (2) Understanding the issue
A politician is bombarded with too much information and needs ways to effectively filter that information.

If a policymaker does not grasp the significance of the issue to his/her constituency, you will quickly lose their attention because they are pulled in many directions.

Also, keep in mind that when you first introduce the topic, a person may not fully understand its merit.

You may need to reiterate yourself several times during the same meeting or over several days and months.

- Repetitive interaction will be necessary.

You may need to use various modes of communication, such as in-person meetings, written communication, and telephone calls.

Understanding the politician
Pitch your message so that it is heard.
### How politicians approach issues

| What is the problem and do I have a responsibility or authority for it? | Who will it affect? Are they my constituents? | If I take a specific action (or don’t), who wins and who loses? |

This is how a politician tends to approach an issue

- What is the problem and do I have a responsibility or authority for it?
- Who will it affect? Are they my constituents?
- If I take a specific action (or don’t), who wins and who loses?
The way scientists usually present information in talks and in print starts with background, then presents supporting details/methods, and then explains the results/conclusions.

Policy makers are busy people. You need to be able to deliver information so that policymakers hear it. They are being pulled in various different directions from moment to moment. Talking about rivers and waterways in one meeting and following it with issues of economy, then zoning, then healthcare

They want to know the bottom line and results/outcomes. People listen when they understand why the issue matters to them. Politicians want to also know why it matters to their voters (i.e. so what?). They want to know about methods for moving forward. Next steps. They may ask for supporting details (i.e. about the methods used to come to the result your presented.
They don’t want to know the background upfront. They don’t want a long explanation before they understand what your ask is and why it matters to them. If they have time for and want background information, they’ll ask questions.
Understanding the issue
To what degree can science inform decision making on a given political topic?

Tornado politics versus Abortion politics from The Honest Broker by Roger Pielke, Jr. (see chapter 4)
Pielke’s discussion is more nuanced that this.

Tornado Politics
- If someone walks into this room and says that a tornado is approaching. What might we do?
- Listen for a tornado siren. Look for weather advisories online. Look outside for the tornado.
- We collectively decided to go to the basement and wait for notification that the tornado is no longer a threat.
- It is easy for all of us to make this decision because we all value our lives and want to live through the tornado.
- We systematically pursued knowledge and were able to make a collective decision.

Abortion Politics
- Now we must collectively make a decision about whether the whole group (our community) will allow abortion or not.
- One person says no to abortions because of religious reasons. Another says let a woman decide for herself.
- We reach an impasse and can’t come to a decision that satisfies everyone.
- In the case of abortion politics, the systematic pursuit of knowledge isn’t going to get everyone to vote the same.
- Thus, we can’t approach abortion politics the same as tornado politics.

It helps to know what type of science policy issue you have in front of you.

- Try to figure out where the issue lies on the spectrum between tornado and abortion politics. This will determine the degree to which scientific information can bring about consensus and a decision or policy action.
- Knowing the degree to which the debate on a given topic involves science and values should be taken into account so that you can decide how to approach your audience.
1. **Qualify your statements**: Explain what is scientific knowledge, your interpretation of the science, and your opinion (based on values).

2. **State your intentions**: Are you there to serve as an advisor or to advocate a particular policy decision/outcome? If you go in as an advocate be upfront that you’re a citizen advocating your personal views. Explain how science does or does not come into play in your advocacy with that situation.

3. **Know your boundaries**: Decide what you are willing to say and not say. Politicians want to know what action to take. Decide what type of answer you’re willing to provide. Have your answers prepared beforehand. You may be asked a question that attempts to get you to say something you don’t want to. Have strategies, e.g. block and bridge, for responding to questions you don’t want to answer. Block and bridge is a strategy for giving the answer you prepared rather than answering the question asked.
   - example: Actually the questions we should be asking is ______. To which I would respond, ______.

Advising: Sharing what you know with others; Provide information based on your expertise

Advocacy: Telling others what to think, what course of action to take, or how to vote
In summary, I give you 10 rules for working with Congress that can be applied to any policy maker.

1. Know your goal.
2. Understand how congress works and makes decisions.
3. Conduct detailed background research.
4. Use your knowledge of the legislative process to determine the timing of your course of action.
5. Be clear and succinct.
6. Understand congressional staff and their influence.
7. Provide concrete suggestions.
8. Present support of science as a means to meet national and local goals, not an entitlement.
9. Be willing to say, “I don’t know.”
10. Follow up immediately.
Code of Conduct for Advocacy in Science

As a scientist:
• Be honest, accountable, fair and a good steward in all of your professional work
• Accept responsibility for the trustworthiness of your science

When acting primarily as a scientist reporting, explaining and interpreting your work:
• Present information clearly, in understandable terms; avoid making exaggerated or unsubstantiated claims
• Be aware of and make your interests transparent when presenting views on particular decisions
• Point out the weaknesses and limitations of your arguments, including data that conflict with your recommendations
• Present opposing scientific views; recognize critiques by others
• Recognize when your activities as a scientist merge into advocacy

When providing advice to others on policies and courses of action (advocating):
• Base your advocacy on your area(s) of expertise, separating formal expertise from experience-based expertise and personal opinions
• Make clear when you are speaking as an individual scientist as opposed to someone formally representing a scientific organization and/or group of scientists
• Be aware of the impact your actions as an advocate can have on science and its uses
• Take steps to become knowledgeable about the complex issues that have a bearing on public decisions

By Nicholas Steneck, Ph.D.

Pielke’s 4 roles for scientists in policy arena: Pure scientist, science arbiter, issue advocate, and honest broker
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