# Research Presentations

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A Communicative Approach

Practical Support for Presenting in English

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## What's the Point of This Book?

Presenting research to others is a practical matter. What complicates it is our feeling that we are on display and that we need to perform for the audience. That's why we get so nervous we might actually shake. It makes us focus to an unnatural degree on ourselves rather than on the people we're talking to: what they can offer us, how we can make it easier for them to help us through their input.

This book focuses on this communication between the presenter and the audience, whether that audience is the colleagues you work with, international researchers in your field, or people completely outside. Most presentations are not an end, but part of a process. And they are not so much a performance as a collaboration. For this cooperative endeavor to succeed, the communication needs to be clear: that's the essential reality of presentations. And it's the guiding philosophy of this book, to help you present almost anywhere.

The introductory chapter sets out some simple principles to help you become a flexible, adaptable, practically-minded presenter. At whatever level you're researching and whoever the audience may be, by considering the context, then planning and presenting accordingly, you'll be able to communicate successfully and receive the input you need—that's the hope.

What follows the introduction is all practical suggestions, and some examples, for creating clear and productive interaction with any audience. They're arranged in chapters dealing with the various elements of presentations for your quick and easy reference. Because we're clearly living in a world of intensified global interaction, this includes English language that can help you with the written and spoken elements of the process for international presentations. But the ideas and techniques should help you present in any language.

Above all, by making the presentation about your research and not about you, it's hoped presenting can become for you the kind of enjoyable, challenging adventure that research itself should be.

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Introduction: Communication First

## What's the Point of Presenting?

What's the point? That's a useful question to ask right at the start of anything. When students are asked why they think they need to present their research, there are 3 common answers, but there are problems with each. Let's look.

Why are you doing a research presentation?

1. "Because my professor told me to. It's one of the hurdles I have to cross to get my degree."

That may be true, but there's a reason your professor asks you to present, and it's not just to test you and make you nervous and miserable.

2. "Because I can put it on my resume."

Sure, presentations at respected conferences, especially internationally, can look good on your resume and can help your career. But, unless you've been asked by the organizers to appear (so-called "invited talks") they are not nearly as valuable on a resume as publications in respected refereed journals.

3. "Because I want to publicize my research."

Yes, a presentation can do that. Still, it's not the best way. A journal article, book chapter, some kind of paper or online publication is more likely to reach a larger audience.

Even taken altogether, these are not the best rationale for presenting research. And they don't explain why organizations go to so much trouble to arrange conferences. One reason for conferences is to allow researchers to meet each other and create new contacts, but the primary function is to provide an environment for people to share ideas and get feedback. This promotes the development and improvement of research in the field in general, as well as for researchers individually.

So, IT'S ABOUT DEVELOPING AND IMPROVING RESEARCH. This is why your professor wants you to present. This is why the Q&A (question time) after presentations is so important. And this is why, unlike most research articles, presentations sometimes happen before you've finished your research. They are not just an activity at the end of your research, they are part of the research process itself. An important part. They don't simply report what you've done: they report what you're doing, what you plan to do, and ask for the input of others to make the process work better. And even before you present, just thinking through the logic and accuracy of your work as you prepare helps you to organize and strengthen your research.

The diagram below shows a typical research cycle, which most of us go through, and continue going through because even when we complete a research project, we often use that to launch into our next project. So, if you're a professional researcher you go around and around through the research cycle until you retire or you die of exhaustion. (In that case, you better enjoy it!) Importantly, the aims of your presentations will change according to your position in the research cycle. Sure, if you've finished and you have your related research papers accepted for publication you may just be "spreading the word" about your research during the presentation. But it's generally not quite like that. Firstly, even if you have completed everything, you may be considering your next research project and be looking for ideas and contacts by presenting and meeting other researchers in your field.



Very often, even if you have your research results, you may want to get feedback on them from other knowledgeable people before publishing. The publishing process sometimes takes up a lot of time as you have manuscripts rejected or requests made for resubmissions or at least changes. By getting feedback through a presentation first you may be able to save yourself time later by preparing a better manuscript for submission to publishers.

But long before all that, you may still be designing your research, so feedback from others in your field could really help. In a very early presentation—which you are more likely to give within your research section, laboratory or department—you may not even have decided exactly what your research is going to look like. Again, your primary reason for doing such presentations is getting useful feedback.

So, think about how to organize and present in such a way that you get the best, most useful input from the audience. Viewing presentations in this practical way as part of the research cycle can change your whole attitude to presenting... in a good way. It can actually make you less nervous.

[Obviously, if you haven't decided on your research method yet, your presentation is going to have a different shape to a presentation with complete results. Later we'll look at how presentations assume various forms at different parts of the research cycle.]

### Let's talk about collaboration and money

There's another role for presentations that doesn't get talked about so much, even though it's pretty important: collaboration. More and more, researchers are collaborating with other researchers or other organizations, often away from their own field. So research presentations are sometimes done to explain the research to people or organizations that we are, or hope to be, working with.

Related to this, funding for research increasingly comes from outside our own faculty, and from outside the university: that is, from business and other organizations. In that case, as we'll discuss later, it's very important that you can explain what you are doing to people who are not so familiar with the theory and perhaps technology you are immersed in.

It's best to keep that in mind while practicing presentations. The future of your research project, and thus your career, could depend on this kind of presentation of your research. It means you need to think carefully about your presentation content, structure and style.

## **Different Audience, Different Presentation**

Who do you think you're talking too? That's a question that might come to mind sometimes when you're watching a research presentation. It's an excellent question, and if more presenters asked themselves that question, there would be a lot more interesting and successful presentations.

The unfortunate fact is a lot of presenters are so focused on themselves—even more so when they're nervous—than about the audience. It's a serious problem. Why? Because it undermines communication. Again and again, we see presentations where important words or concepts are not understood by a significant proportion of the audience, and no attempt is made to explain them. In fact, this seems to be a far more serious problem in research presentations than in other kinds of presentation context, such as in business, the government or NPOs.

In short, there is a silent war in the world of research presentations between research specialization and common sense. Part of this stems from the mistaken assumption that a research presentation has a certain kind of form, style and professional language, and that it's the audience's responsibility to deal with that. Perhaps the thinking is, "This is not a business environment, where we have to care about the consumer; this is academia, where we have to show how much we know." This is a mistake mostly because even within the academic world presentations are communication and there are different kinds of audience, with different levels of knowledge.

Let's use a sporting analogy to clarify: baseball. (You may prefer table tennis or Final Fantasy... sorry, those don't fit.)



Imagine the world of academic presentations is a baseball ground. There is an infield. This is your research group or lab. You work together on the same or similar projects. On the whole you understand each other's work very well. It's based on the same concepts and technology, has shared aims. If we move further out, let's say to the edge of the infield, there is our department, where there is some shared knowledge but more diversity of topics. We have a generally shared understanding of the field, but we may lose each other a little in our specialist knowledge and vocabulary. Now move out to the outfield, the much broader expanse of people in our faculty, covering a variety of fields. Discussing our research is getting tricky. There is just too much unshared knowledge and language. Go further, to the university in general, then out to people outside the university, organizations that we may be collaborating with, or just common citizens who support our research through their taxes. How in the hell do you communicate with those people way out their outside our field, the outfield? Why would you want to?

### Why bother presenting to outfielders?

You may not want to hear this, but if you're serious about collaboration and communication in general you need to think about it. From the beginning of your research, your mind has probably been focused on what is happening in your research group or laboratory. This quickly becomes your natural environment and you are surrounded by people who are working on the same or similar projects. In a way, you may feel at the beginning that your first mission is to become more like the people around you in that environment. You need to learn to think and speak like they do so you can be understood and be part of a research team.

It would probably be a mistake, though, to limit yourself, your thinking and your communication to that environment. Firstly, you don't want to lose contact with the "real world" and go crazy. But there are also practical issues. Many conferences you may present at involve people from a variety of loosely related fields, extending to the edge of the infield and beyond.

Most importantly, research is happening more and more across research fields: between mechanical engineering and chemistry, for instance, or between medicine and information science. Even within your own research, not just the presentation environment, you may need to communicate well outside your field to collaborate.

So, there is a good chance you will have to work with and communicate with people with different research expertise in the not too distant future. On top of that, you may need to communicate your research to people who are not even researchers but play a role in making your research possible, whether it's funding organizations from the government or industry, or tax payers—the general public.

### How should this affect your attitude?

Research presenters have a bad habit of completely underestimating the difference between an audience from within their research field and more general outfield audiences, whether they are a little outside or way outside their field. For some reason—possibly because it's easier not to think about it—we tend to overestimate how much an audience understands our research.

So, firstly, try to put yourself in your audience's position, and to do that you'll need to face the frightening reality that not everyone thinks and talks like you. And you'll also need to accept that talking "above" the level of your audience may make you feel good, may protect you a little from criticism of your content, but it won't impress most audiences. And, anyway, in most situations, your main aim is not to impress people with your knowledge, but to communicate your research, show how new and useful that research is, and gain useful feedback, input and support.

## **Clarify Your Situation**

If we consider what we've discussed so far about your position in the research cycle and the kind of audience you're presenting to, it can be visualized as in this diagram below.



The horizontal axis represents your movement through the research cycle. Here it's represented not as a circle but a straight line, and you'd usually be moving from left to right. (Of course, it's possible you could have some kind of problem, such as a failed experiment, which forces you to take a backward step sometimes. That's life.) You should be able to locate yourself at some point on that axis at any time through the cycle, and as shown later, your presentation structure will need to vary accordingly.

The vertical axis represents the audience, from your closest colleagues at the bottom, to the people furthest from you at the top. These are the people with whom you have the biggest knowledge gap. They aren't likely to give you so much pressure in terms of questioning the support for your research, requiring the tiniest details of your data and methods. But they are the biggest communication challenge because of the lack of shared knowledge and vocabulary.

When you do your first presentation to your professors and colleagues explaining your research plan, you're probably located around that red circle on the bottom left of the diagram. If you are collaborating with people outside from the beginning then that red circle would be raised higher. In the course of your research life, you will probably go and up and down as you do presentations to different kinds of audiences.

Here's where it gets complicated: because the audience attending a presentation may not be just one type of person. You could be presenting to a group that contains your colleagues or others very close to your field along with people further up the vertical axis—the outfielders. In other words, the red circle doesn't adequately represent that situation. It should be a vertical line from infield to outfield. In this challenging case—and it's quite common—you have to design your presentation with the specific detail that an expert audience wants as well more basic background explanation that the non-specialists need to understand you. And you probably have limited time to do it. Yes, tricky! So we'll discuss this more later. For now, before you begin preparing a presentation, locate your presentation on the above diagram. It will help you prepare intelligently and communicate successfully.

## The Audience: What Do They Want?

### Why don't we really see them?

It's amazing how little some presenters think about the audience, and this is especially true of presenters of <u>research</u>. Why? People who work in business, especially marketing, are thinking about their customers and how they communicate with them all the time: the business and thus their livelihood depends on it. They need innovative ideas to survive in a competitive marketplace, but those ideas and related products are almost useless if they cannot convey their value to the consumer. This is likely to influence the way they communicate, even amongst themselves.

With the intensified collaboration between university researchers and outside organizations, perhaps things are changing in university research groups too. But so far it's not evident in the way student researchers present. On the whole, they continue to present as if they are undergoing a test. That is, they are focused on themselves, not the communication.

That self-absorption is amplified by two things. Firstly, as mentioned earlier, new researchers are concerned primarily with acceptance within their immediate professional community, the people they spend so much of their time with and depend upon. Since a research environment tends naturally towards specialization, there is a kind of centripetal social force at work, a movement inwards. In plain terms, we can lose touch with the real world: in some cases, that's even expected. It's called "focus".

Secondly, presenting, like public speaking in general, makes most of us more or less nervous. There is a sense of threat associated with talking alone in front of groups of people that seems to go deep into our primal past and to persist through our individual and collective unconscious. (See the chapter on "Delivery" for advice on how to reduce nervousness.) One way to respond to a threat is to attack, and occasionally you can actually see this in the way someone presents and handles questions; but this is not recommended, and fortunately not so common. Most of us just tend to withdraw into a crouching, defensive experience of nervousness. Anyway, an effect of that is that we become somewhat overly focused on ourselves.

### **Does the Audience Really Exist?**

The crippling effects of nervousness are often discussed, but we don't hear so much about what it does to the communication. Specifically, there is a lack of real consideration of what the audience wants and needs. If you're busy dealing with the complexities of your research and you're nervous about a presentation, you may actually prefer to forget about the audience. In fact, there is one piece of advice floating about that if you're nervous about public speaking then you should imagine the audience as potatoes, which amounts to the same thing: the audience is not human, they don't exist at a social level, you can forget them. But they are, they do, and you can't. In short, they exist, and you better deal with it.

Forgetting the audience or transforming them into vegetables is not a viable remedy for nervousness and, more importantly for us as presenters, it's a huge mistake for communication. How can you seriously prepare and deliver a presentation without considering your audience?

### What Motivates Them?

We discuss the issues of different knowledge levels of audiences elsewhere, so here let's just examine the issue of audience motivation that is rarely even mentioned in the context of research presentations. To begin, let's clear away the deadwood. There are usually some people, hopefully a minority, who don't belong there. They are there because they have to be—"My professor expects me to be there"—or because it's the most comfortable place to be: they have little interest in your research, but they are at the conference and have to be somewhere so they might as well take a seat in the air-conditioned lecture room and hope something interesting happens. Maybe they're still working on their own presentation while you're speaking. Maybe they're surfing the Internet. This is rude, but they are not bad people. In fact, they may be us. On the other hand, while acknowledging their existence, we can conclude that they are, in practical terms, quite useless.

The audience members we're interested in are those who have a genuine interest in your research. They really want to be there; they want to know what you're doing with your life. Some of them may be working on exactly the same issue as you: they are intensely motivated and important to you. Some may be working in a related area and have a definite interest. Some may have a tangential connection, and are on a "fishing expedition" just in case something that affects them emerges in your presentation. Others just have a general curiosity. They have different levels of knowledge and motivation, but all of them want to learn, and many of them want a chance to contribute ideas or questions to help you develop your research.

### So what do they expect?

Since some audience members have attended a lot of poor presentations, they may have learned to not expect too much. So long as they can get the new information they are looking for, most won't complain. But, like you, they are busy. They have a lot on their mind. They really want you to get to the point quickly and explain everything clearly. They don't want to be forced to battle their way through a jungle of data to discover what might be useful for them, and might not be. You are probably the same, so you'd best respect that. Do your best to communicate as directly and clearly as possible.

### What are they not interested in?

Your professors would like to see that you are quickly gathering knowledge and expertise in your field, because that's part of their job. Other audiences, though—at conferences, for example—have little reason to be interested in learning how clever you are. They're usually much more interested in your research than your knowledge, so keep your focus where it belongs: what you're doing, not what you know.

## **Across Cultures, Speak Directly and Clearly**

When you present in an international context, it's especially important to say what you mean as directly and simply as possible. Here's why...

Anthropologist Edward T. Hall in his book *Beyond Culture* (1976) differentiates between "high context" and "low context" cultures. We should be careful in making cultural generalizations, but this may be a useful idea to consider when preparing international presentations because it can help us better understand cultural differences in communication style and thereby adapt ourselves to them when we present our research.

In high context communication, people already share a lot of background, so not so much is explicitly stated: the conversation relies mainly on context (e.g. social context, roles or positions), nonverbal clues (e.g. pauses, silence, tone) and cultural knowledge. In contrast, in low context communication, there is not so much shared background. This kind of communication requires clear, direct messages and a high level of specificity.

The degree of context used in communication varies across cultures. For example, English speaking cultures are quite low context cultures. However, Japan and China, like most Asian cultures, belong to the high context category, where communication partners are expected to be able to comprehend the implicit meaning of the verbal or nonverbal message.

Research suggests that high context communication is more common in cultures which tend to be collectivist, which is to say where the emphasis is upon groups and group reliance. Those cultures may also have a stronger sense of tradition. Such cultures may also have less ethnic or cultural diversity. If we consider each of those three points—group reliance, tradition and ethnic uniformity—then we can see that Japan fits the description of a high context culture. Quite a lot of things don't need to be said because people understand each other through shared cultural background.

Naturally, low context communication might be expected to be more common in cultures which are more individualistic, somewhat less fixed to tradition, and ethnically diverse. Germany and the United States are the most obvious examples

So, what should we do with this information? Perhaps it can be helpful in cross-cultural exchanges—such as for a Japanese person going to North America for a conference, or a European coming to Japan—to know that we may communicate, and interpret communication, differently. The most important implication is that when presenting at an international level, you should carefully consider how to ensure that even people used to low context communication will understand what we are saying. You can't assume they will guess what you mean if you don't say it. And this is especially the case where you're talking about innovative research with technical complexity and language that may be unfamiliar.

Of course, we don't want to bore people who can guess our intended meaning, but on the whole in international presentations it's best to present your ideas and support as directly and simply as possible and not rely on implicit meaning and subtle nuance.

## **Time: A Presentation is Not an Oral Article**

One of the main reasons for the many poor research presentations that are done across the world every day is a simple erroneous assumption: that a presentation is basically just a spoken version of an article. This is a fatal mistake: "fatal" in the sense that it's likely to kill your presentation.

Looked at superficially, a presentation and an article can appear much the same. As discussed in detail later, they can have similar parts such as method, results and discussion. That's the structure, but the communication—the flow of information—usually needs to be very different. Let's look at the key challenges by imagining that you already have an article completed. Why can't you just put it onto slides and read through it to the audience? Why are presentations often more difficult to prepare than articles, even though people spend less time on them? Articles exist principally in space or cyberspace: presentations exist in time, the shared social time of clocks.

### It's all about time: do the math

Native English speakers generally speak at a rate of around 110 to 160 words a minute, depending on the context. But a presentation, where you are showing slides and explaining displayed data is going to be slower. Add to that the fact that you are likely to be using some difficult language and concepts, plus the possibility of non-native English speakers who require longer to comprehend speech usually, and time required for moving between speech and visuals. You might work with a rough guide of 100 words per minute and it's recommended to try to go at least 10% below that during rehearsals, so a 20 minute presentation probably shouldn't be over 1800 words. Now, a written article, excluding the abstract and references, usually runs between 3,000 and 8,000 words in English. See the problem?

That's just the beginning of the problem. Sometimes you can hear presenters speaking (or worse, reading aloud) very quickly to the audience. They may just be nervous, but it's usually a timing problem they're trying to resolve. But it won't work because it's not just about how fast you can talk; it's about how quickly the audience can understand. That's out of your hands. Many presenters don't think this through, perhaps because they sense the problem and prefer to ignore it. Of course, the time problem disappears if you forget about the audience: then you can speak as fast as you like! Plain stupidity.

Thinking about the audience reveals inconvenient truths, but it shouldn't be hard to think about them because you're an audience member too sometimes. Just consider your own experience. Also, think about how you read an article. If you are a good reader of English, you may be able to read 200 to 300 words a minute of average level text, but you probably don't read an article at that speed because you need more time to comprehend the content. You read back over parts you didn't understand, you go back to parts you have forgotten, you take your time looking over the data, you check your dictionary or online to help you understand. It's not strange to spend over an hour on a 5,000 word article. But in the audience of a presentation you don't have that kind of time. Sure, you might be able to do a quick online check of some word or concept, but you then risk losing touch with the presentation. A presentation happens in "real time". You can't wind back. This is what makes listening more difficult than reading, and it's what often makes presentations more difficult than articles both for those who make them and those who receive them.

## **Good Timing Usually Means Cutting**

Here's the fatal paradox of presentations as compared to articles: as shown above, in a presentation you often need to give more explanation, more slowly, in much less time. It seems like the only way out of this massive problem is to build a time machine. But, since we won't have that technology available for some time, there's just one realistic option: cut content.

Cut content?! This is so difficult to imagine because in every other area of your research the emphasis is on paying attention to detail as much as possible. Even in articles, we may try to include as much detail as we can within the prescribed page limit or word limit. Presentations don't work like that. Time is limited, the audience's capacity to comprehend in real time is limited. You have to choose what to include and what to omit very carefully. This requires a lot of thought and forces you to make some difficult decisions. You have to work against that impulse to always include more detail. In fact, you need detail, but you have to select only the most important detail. How do you make such decisions?

Here's some good news. You can, and should, tell the audience you have the detail and make it accessible to them outside your presentation. Traditionally, this would be in handouts distributed to the audience, but these days you have other options, such as material stored online that the audience can access immediately through links (perhaps through a QR code on the screen). You can also prepare extra slides containing detail that you can show during question time if it becomes an issue or you have time there.

### Language for indicating detailed information is available elsewhere

I don't have time to go into this in detail here, but if you'd like more about this, please...

ask me during question time.

talk to me afterward.

visit this website.

contact me by email.

use this QR code.

How do you decide which information is worth including in your presentation and what can be moved outside? Ask yourself, what information is required to support the main idea, purpose or research question you have stated early in your presentation. This is what you need. Information that demonstrates the validity of claims or results should be included. If some of the detail won't fit, make sure you have it stored somewhere for the audience and, again, let them know that information is available.

Don't do this: put your extra detail on slides and expect the audience to read through it as you talk. If you're desperate for the audience to see how much data you have (you shouldn't be) then show the data, but tell them, "Please don't try to make sense of all this. We can come back to it in question time if you like." In general, though, keep your slides as simple and clear as your speech (more about this in the slide design chapter); don't use slides as a dumping ground for extra data.

## Don't "Dump Data"!

Data dumping is a term used in data science to refer to moving a lot of data from one system or location to another. In the context of research presentations "dumping data" means throwing a lot of information at the audience to impress them. It's very common because many researchers think of the audience as people who are judging them. If you are a student, your supervisor may even tell you to dump data, even if they don't use that term.

Of course, it's good to have a lot of data to support your research idea. But presentations are communication with strict limitations. There is limited time for the communication and the audience is listening to many other presentations apart from yours in a short period, so both you and your audience are under pressure. Data dumping reduces focus and clarity, and therefore reduces the effectiveness of your presentation.

Here's what a well-known presentation specialist, Jerry Weissman writes about this:

"The audiences to these Data Dumps are victims. But sometimes the victims rebel. 'And your point is?' and 'So what?' are the all-too-common anguished interruptions of audiences besieged and overwhelmed by torrents of excessive words and slides" (*Presenting to Win*, 2008).

So, yes, get all the data you can for your research. But your *presentation* is a different matter. You need to make important and difficult decisions about what is too much for the audience to absorb, and so what should not be included.

Why do researchers often dump data in presentations? The main reason may be lack of confidence. The data dump is being used as a wall to try to impress the audience and so to protect the speaker.

Why don't data dumps impress audiences? Because most audience members are intelligent and have seen a lot of presentations. They know the difference between useful supporting information and data that is just being used as a protective wall. They are busy dealing with information in their own work: they don't need the noise of more unnecessary data.

\* Don't <u>decorate</u> slides with data to impress people. It may "look" professional, but in reality it's the opposite.

## **Signal to Noise Ratio**

Signal to Noise Ratio is a term used most often in physics and engineering. It compares the level of a desired <u>signal</u> to the level of background <u>noise</u> that is produced in a transmission... when using an antenna, for example.

But SNR is also a really useful concept to keep in mind when preparing a presentation. The signal is your main point and the support for that. The "noise" is information that doesn't serve the main purpose... it just takes up precious time in your presentation and space on your slides. Here's the scientific formula for SNR:



This formula works perfectly for presentations. The more noise (extra information) you have in a presentation, the more difficult it is for the audience to hear and see your main point. This means that the power (effectiveness) of your presentation is reduced.

Think of what the audience is experiencing. Try to clear away unnecessary information and make the central idea (your main point or thesis) easy to see and hear throughout your presentation.

Reducing the noise means increasing your communicative power. Keep that in mind for both your speech and your slides.



Don't try to impress through complexity. It doesn't work.

Impress through your content and clarity.

## **Do You Need a Presentation Script?**

### Why It Helps to Write a Script

A script takes time, and often people are in a rush before a conference. So it's easy to convince ourselves we don't need a script. But, generally speaking, it's good to write one, even though you probably shouldn't read it while presenting. Here's why:

1. The script can be read and <u>checked</u> by others before you deliver the presentation. You can readily receive invaluable feedback as well as language correction through a script, which could save you embarrassment and render your presentation both more accurate and more effective.

2. Reading a script is in most cases not desirable, but if you're delivering your presentation through memory and notes and you have a "meltdown," suddenly losing your chain of thought, the script provides a "<u>safety net</u>" to help you restart and complete your presentation. Hopefully you won't have to use it, but it's nice to know it's waiting there in case you do.

3. The script can be <u>distributed</u> to the audience after your presentation or you can offer to send it to interested people. This means that they will take something of your presentation away with them. It also allows you to reduce the amount of detail in your presentation because you can refer the audience to that text.

4. You have a <u>permanent record</u> of your presentation, which should be useful in future. You may deliver a similar presentation again, for example, in which case you can simply modify the script you have to suit the new context. It's more efficient than attempting to reconstruct your presentation using the limited data and notes on your existing slides.

### Why It Helps to Write a Script <u>FIRST</u>

It's not always the case, but in general it makes sense to write a script first, then prepare slides based on that. There are a couple of reasons for this.

### 1. Logical "Tightness" and Flow

In academic writing you typically connect sentences logically, and build them into paragraphs, with transitions between. As you write you make explicit connections and finely coordinate words, sentences and paragraphs in a way that you otherwise probably wouldn't do. In other words, writing encourages you to work logically and carefully at a detailed level, making clarifying insertions, removing unnecessary elements to produce a smooth discursive flow. Presentations built through slides can sometimes lack this flow, seeming instead rather mechanical as the speaker "jump-cuts" from one slide to the next.

### 2. Prioritizing Speaker over Slides

When you watch presentations, sometimes you can actually guess those that have been prepared without a script. The speaker is obviously following along with each slide, sometimes they're actually reading the slide. This has the effect of prioritizing the slides and focusing the audience's attention there. Simply put, it is as if the speaker is a servant to the slides. But, ultimately, the slides should be there to serve the speaker. When that relationship is inverted, with the speaker following the slides, it usually makes the speaker seem somewhat passive. It can take the human energy and momentum out of your presentation.

## The Preparation "Feedback Loop"

The research cycle is basically a feedback loop, and you can also use a feedback loop when you're thinking about the process of creating a presentation. You create a draft through notes, probably a script, then slides.

You try it to see if it works by showing or demonstrating it to your colleagues, or at least by rehearsing. You get feedback and/or review personally what would make the presentation better, clearer, then you adjust it and try it again, just like running an experiment.

As you do with your research, try to examine it objectively, or at least from the subjective view of your audience.



The presentation itself is actually just part of the cycle. You try it, you may get some feedback. Ask others to tell you about their experience of your presentation if possible. Anyway, reflect upon every presentation you do. Don't expect perfection, but think about any problems you had and how you can avoid them next time. Think about the aspects that seemed to work well. Make notes to use in preparing your next presentation.

Above all, begin preparing and testing your presentation as early as possible. The more feedback you get the better the presentation will be. And you can't do that very well if you're still working on the presentation on the airplane going to the conference. So it's simple...

## **Begin Preparing Early!**

# **Proposals/Abstracts**

## **Fundamentals of Proposals/Abstracts**

Conferences across different countries, different fields of research, and different research organizations of course differ. Consequently, the style and format of presentations and abstracts is not at all uniform. But, there are some general guidelines that might help.

### What is an abstract/proposal?

An abstract or proposal is a very brief (most often between 100-300 words in length, sometimes longer) overview of your presentation. Technically, what you send to conference organizers for selection might best be called a "proposal" but even at this stage they are often called abstracts. If you are selected to present, this summary will appear in the conference website (possibly in a book).

### There are 3 primary functions of writing proposals/abstracts:

- 1). to give the conference committee a way to select papers.
- 2). to find an audience for your paper... the right audience.
- 3). to clarify your own thinking and presentation structure.

### Before you begin, think...

You need to make sure you provide what is required by

- a). the organizers in terms of the general theme(s) of the event or session.
- b). the specific presentation and abstract guidelines.

So, read the conference overview/philosophy and submission instructions carefully.

\* Search online for examples from previous conferences by the same organization.

### **Common Abstract Organization: Questions to Answer**

- ①. WHY you did your research (background, problem, motivation)
- ②. WHAT your research showed, or tried to show, or is trying to show (main idea)
- ③. HOW you did it (materials/method/procedures)
- ④. WHAT support you found (results)
- ⑤. WHAT the results mean (discussion/meaning)
- (6). WHAT might be the effects (implications, importance)

### Title

Make your title clear and concise. You should ensure that it reflects the overall aims and themes of the conference and is understandable for your intended audience. It's OK to use a title that catches attention, but make sure that is also conveys some idea of your content. On the other hand, don't put too much detail in the title. In short, try to find a good balance of information, impact and clarity.

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- Cohesive flowing smoothly and logically across the parts.

\* If you're not a native speaker of the language, you definitely need a native-speaker check.

### **Background (Motivation) and Aim**

What is your presentation trying to achieve? This needs to be made explicit; if you as the author are not sure, it is unlikely the selection committee or your potential audience will understand. Try to give clear motivation and aim for your research. These are often used by conference organizers to decide which papers will be accepted, and by delegates to decide which presentations to attend—so clarity is essential.

### Content

You may refer to some of the key background literature to the paper. Not too much!

If you're doing a research study, briefly summarize the process. A few clear sentences about each element such as sample, methodology, data collection and analysis is all you need. If you have results, state them simply.

At the end of your abstract, refer to the importance, possible impact of your research. A thought-provoking conclusion may help influence the selection committee and attract an audience.

\* Don't go over the word limit... it suggests you lack organizational control.

But don't write far too little—it could appear lazy.

### References

Some conferences don't want references in the abstract, some limit the number of references to be used. If you use them, you should aim to include only references that are up-to-date and strongly connected to the content of your paper.

### Steps of proposal preparation

- 1. Consult the conference website.
- 2. Ensure your research fits the conference themes.
- 3. Read the proposal/abstract instructions (e.g. length, references?) There may be a proposal template to follow.
- 1. Search for abstracts from previous conferences for models
- 2. Write a rough draft.
- 3. Show it to a colleague.
- 4. Redraft
- 5. Get it checked by a native speaker if in a second language.
- 6. Send it well before the deadline.

### **The Writing Approach**

Clear – easy to read, with not too much jargon and no errors.

Keep these 3 points in mind. Make sure it's

- Concise with no unnecessary information and words



## **Proposal (Abstract) Examples**

### The Positive Effects of Banana Consumption on Creative Intelligence North American Society of Nutritionists Annual Congress, San Francisco 2013

### (\* Sentences are separated here for clarity)

- ① There is growing public interest in the influence of nutrition on the brain. Doraemon Laboratories suggested in 2012 that bananas may improve certain mental functions, but no credible investigation of the effects of banana consumption specifically on creativity have formerly been done. (Background)
- ② This paper is a report on research we have undertaken in order to assess the impact upon creative intelligence of eating bananas. (Aim)
- ③ The present study used Stanislavsky's Creativity Test to compare a control group of 80 university students with a similar group asked to eat five bananas each day over a three-month period. (Method)
- ④ The latter group's results on the creativity test at the end of the period were on average 17% above those of the control group. (Results)
- This suggests enhancement of creativity through high levels of regular banana eating. (Meaning)
- 6 It is expected that these results, if they can be reliably duplicated, will have a dramatic impact on food science and global consumption of bananas. (159 words) (Importance)

### **Development, Freedom and Happiness: A Global Perspective**

### Inglehart, Foa, Peterson and Welzel University of Michigan, Harvard University, Jacobs University

Until recently, it was widely believed that happiness fluctuates around set points, so that neither individuals nor societies can lastingly increase their happiness, meaning happiness levels of entire societies remain fixed. Our study, however, challenges the idea that happiness levels are basically unchangeable, and suggests that increased freedom is strongly related to improvements in happiness over time. Data from representative national surveys carried out from 1981 to 2007 was compiled and statistically examined. Regression analysis showed that happiness rose in 45 of the 52 countries. We found a positive correlation between happiness and the combined effects of 1) economic development, 2) democratization, and 3) increasing social tolerance. We argue that improvements in those 3 conditions have increased the extent to which people perceive that they have free choice, which in turn has led to higher levels of happiness. This study suggests a need to modify previous assumptions that happiness cannot be substantially changed, and it has clear implications for policymaking in countries around the world. (165 words)

\* Adapted from an actual article published in the journal *Perspectives on Psychological Science* 3:4 (2008).

## A Proposal for Research in Progress

### Suggestions for writing proposals for research in progress:

- Spend more time on previous related studies.
- Give any early findings (pilot studies, etc.).
- > Discuss various <u>possible</u> results and their meaning.
- > Emphasize that any results you get will be useful.
- Spend more time on value/importance of your question/research.
- State your intention is to gather suggestions from the audience.

### **An Example Proposal for Research in Progress**

### Chocolate and the Desire for Romance: a longitudinal study Banksia & Sakurai (2013)

We are currently studying whether eating chocolate acts as a substitute for romantic love. Chocolate contains the chemicals serotonin and phenylethylamine, which are also naturally produced by the human body. Various studies (Atkins 2001, Ng 2008) have shown that these chemicals are released into the brain during experiences of romantic love or passion, causing raised blood pressure, increased heart rate and feelings of euphoria (幸福感). Ahmed (2008) found that eating chocolate produces similar biological and psychological changes. This raises the guestion as to whether eating chocolate may reduce a person's need or desire to engage in romantic relationships: if we can receive the positive emotional effect from simply buying chocolate, why bother with the complexities and pain of pursuing romantic love? We are in the second year of a three-year study involving monitoring of 106 single men and 107 single women aged 20-30 in Hawaii. They were divided into three groups: a group asked to refrain from eating chocolate, a group encouraged to eat chocolate regularly and a group given no special instructions. Subjects are asked to report their romantic activities once per month. This presentation provides preliminary data from the study. It is expected that if a strong correlation is reported, consumers may change their attitudes towards eating chocolate. It is also possible that the increased consumption of chocolate in recent years may help to explain decreased marriage and birth rates across the world. (243 words)

## **Infield Versus Outfield Proposals**

Below are 2 proposals for presentations on the same topic: technology for a safe time machine. One is for an Infield presentation, the other for Outfield.

- Q1. Which do you think is for an Outfield presentation, A or B?
- Q2. What are the differences between them?

### A. Unlocking the Door to Safe Time Travel: Encoding Energy

Recent breakthroughs in time machine technology suggest we are much closer than ever imagined to the human dream of travelling through time. As research into time travel (NITTID) intensifies, engineers and physicists have faced one particular problem, the loss of matter during time travel (Schopenhauer 2078, Sakashita 2084). Since loss of matter means that a human moving through time using existing technology will lose parts of their body and very likely die, resolving this issue is extremely important. We have built and begun testing a device to address the problem of losing matter, a technique for encoding energy for transmission through time so that matter may be tracked and organized throughout the time travel process. The results of our first tests showed that while we were unable to completely prevent matter loss during time travel, there was a significant reduction. This presentation describes the new technology, the testing and results, and explains why this may be a major step towards realistic time travel in the near future. (167 words)

### B. Subatomic Locational Encoding for Near-Instantaneous Tranversal Temporal Injection Devices (NITTID)

This study sought to test a technique for overcoming a fundamental obstacle in NITTID development: the frequent irreversible subatomic dissolution of transported matter (Schopenhauer 2078, Sakashita 2084). A modified internally microprocessed subatomic energy encoding program and accompanying hardware were created to encrypt disparate identifiable elements at the pre-detemporalization phase of subatomic excitation. By inscribing this data upon the teleported energy, the typical subatomic dissolution would be minimized. The new device was tested with a Wollenweider plasma KL-7 hyper-excitational detemporalysis facility transporting 7 microgams of fissile matter over a temporal span of 15 nanoseconds. The Nobita coefficient of subatomic loss was determined through measurement at three levels of hypertensity (0.4, 0.6 and 0.8 Flv.) and comparison with previous studies using the same parameters without the locational encoding. Analysis of the results showed that substantial subatomic dissolution remained, but a significant reduction of loss was attained, especially at the 0.8 Flv. level. This suggests the feasibility of subatomic locational encoding to ensure the integrity of objects while using NITTID. (167 words)

## **Strategic Proposal Writing**

Proposals can be a very useful tool for researchers in clarifying and organizing ideas in summary form when preparing a presentation. But they are also very important in determining whether you will be accepted to present at a conference. So you should think carefully and strategically. There is no simple single formula for writing strong, successful proposals. Why? Because the requirements vary depending on the context. But what points are usually essential for proposals in any field?

### 1. Content:

- suiting the theme of the conference
- original (new, original, thought provoking)
- significant (useful, important)
- inspiring interest
- theoretical, practical, research basis
- well supported by research data, logic

### 2. Structure:

- suitable length
- clear purpose
- Iogically cohesive, with the sentences connected smoothly

### 3. Language:

- > appropriate vocabulary for the intended audience
- > accuracy (If it's in a second/third language, always get a native speaker to check it.)

Of course, you need to be thorough in providing all the information that is usually required of a proposal (such as background, point, method, results, implications), but this varies according to research fields, regions and organizations. Some conference organizers provide very detailed explanations and criteria for judging worthy proposals. It's also very important to **look at model proposals**—for instance, abstracts/proposals of previous conferences by the same organization at a conference website.

A proposal written for a presentation with much the same content may vary according to the <u>context</u>. You have to think about priorities for each situation.

If the conference proposal acceptance is **<u>highly competitive</u>**, think about putting **more emphasis on the originality and significance** of your idea.

If you're confident your proposal will be accepted, but worry <u>whether people will attend your</u> <u>presentation</u>, you still need to emphasize originality and importance, but perhaps **extend the background** and **simplify the technical language** so that it's accessible to a broader public.



## How Proposals are Judged by Reviewers (Example)

"Proposals are double-blind reviewed. Three peer reviewers will review all proposal submissions. Reviewers will not know the authors' identities. All proposal reviewers will use the evaluation criteria and scoring rubric below. Total possible maximum score is 25 points." [\*I have removed the middle range boxes for clarity.]

Rating Rubric	Poor 1点	Excellent 5点
1. Currency, importance, suitableness	The topic is not current. Lacks importance (insignificance). Not suitable to the conference/session. Not a presentation worth attending.	The topic is cutting-edge, relevant, Important (significant contribution), ground-breaking Suitable to the conference/session Definitely a presentation worth attending.
2. Clear purpose, specific appeal	The objectives are not stated, implied, or clear. Lacking focus, specifics to interest audience.	The objectives and outcomes are clear from the title and content. Readers can guess what will be learned in the session. It contains specifics that make the reader want to learn more.
3. Basis for research	Proposal does not mention theory, practice, or research. It is unclear how this presentation is connected to the field's body of knowledge.	The proposal refers specifically to the appropriate theory, practice, and/or research. Makes a detailed, thorough, and comprehensible connection between content and its basis.
4. Support for practices, conclusions	The proposal makes claims with little or no logical and evidential support for those claims.	Details are provided indicating that the practices, conclusions, or proposals will be well supported by logic and evidence.
5. Proposal clarity	The way in which the proposal is written indicates that the delivery of the presentation may be poor.	The proposal abstract is well written and indicates that the presentation will be of professional quality.

### **Other Factors Affecting Selection of Proposals**

- range and significance of topics
- level of expertise
- interests covered
- professional and geographic distribution of the participants
- relevance of the proposal to the needs of attendees and the convention's theme

## **Key Phrases for Proposals**

You can select phrases from the following sections to give a basic foundation for your proposal. Of course, you don't NEED to use these... they're just for your convenience as you are working in a second language.

### 1. Background, motivation

n idea that you test]

### 2. Main task

This paper/presentation discusses/describes... [Referring to the presentation itself.] This study aimed to...

The purpose/aim/objective/goal of this study was to...

This research examined/studied/investigated

The research questions were...

### For explorative research

This presentation explores/discusses... This study/research/project explores... [Referring to the presentation itself.]

This study/research/project examines... We are currently/presently studying...

### 3. Key procedures/methods/theoretical base

In order to investigate this	[logical transition from statement of main task]
We therefore	[logical transition from statement of main task]
To determine this	[logical transition from statement of main task]
To this end	[logical transition from statement of main task]
The study used	
The research was done/undertaken b	by (method)
The research was done/undertaken of	over (time)
We used/utilized/adopted	

.... was used/utilized/adopted.

### 4. Results

I present evidence showing...

[Referring to the presentation itself.]

The (key) results were .....

We found/discovered/identified...

If you don' have results yet

We predict that...

We expect...

Preliminary results suggest...

Results of a pilot study suggest...

If you don' have results yet, but you hope to have them when you do your presentation We will show the results of the study.

### 5. Discussion

The/my/our results show that ... The study identified... These results support the hypothesis/contention/theory that... These findings suggest... Based on the results/findings... These results indicate/suggest that ... What these results prove is ... This may indicate that ... This suggests that... This suggests that... These results may be explained by... I believe this is due to ...

### 6. Implications/applications/importance

[transition from discussion] Based on these findings,... This is important because... A key benefit of this is... We expect that... It is expected that... I think this has implications for... This may have important implications for... This may have applications in... This could make a useful/significant contribution to... This may facilitate... This may help... May/could be effective for... May/could address the problem of... May/Could provide a solution to /remedy for... May/Could solve the problem of... May/Could enhance/improve... We believe this may/will... This /these results suggest/support the need for... We recommend... / Recommendations are offered for...



## **Template: Building Your Proposal**

Think of your own presentation idea. Can you answer these questions?

1. WHY did/will you do this research? (background / importance) 2. WHAT did/will you (try to) prove/conclude? (your idea or hypothesis) 3. HOW did/will you do it? (method of gathering support for your idea) 4. What did you (or do you expect to) find? (results) 5. What do/could the results mean? (discussion) 6. WHAT are/will be the implications/importance of your research?

## **Proposal Draft**

Now, use your outline to write a draft of an abstract (about 150 words) that would be:

a). selected by a conference committee.

b). likely to attract your target audience.

Title*

# **Logical Structure**

## **Basic Presentation Structure**

Below is the structure of a standard presentation, in English and Japanese. It's perhaps much like what you learned in high school. It's remarkably simple, but that's also its strength. It's designed to adapt to various situations and to communicate content that might be quite complicated.

The thinking underlying this structure is simple. <u>A presentation is a logical organization of</u> <u>evidence to support an idea</u>. Research presentations, which we will come to soon, are similar in structure because they are based on that same concept.



## **Basic Presentation Template**

Intro
Background:
Statement of Idea:
Outline (parts):
Body
Support II
Support III
Conclusion
Synthesis / Summary:
Restate Key Idea:
Final Comment:

## **Basic Presentation Preparation Questions**

### **Reflecting on Your Structure**

### Introduction

1. Is some background information given? What?

### Body

6.	Are the parts of the body clearly, logically structured?
7.	What are the key points in the body?
8.	Do the points in the body really support the thesis?
9.	Is the research material presented helpful?

### Conclusion

10. Does the conclusion restate the thesis?
11. Is the importance emphasized? How?
12. Is there some kind of memorable final line? What?

Do you have any further suggestions for helping to improve the presentation?

A research presentation is a logical organization of evidence to support an idea... and get feedback.


## **Research Presentation Structure**

The structure of a research presentation is not absolutely fixed. It depends mostly on the conventions of your research field and perhaps the conference or meeting you are attending. But even then, there may be room to change if you like.

It may surprise you, but the basic structure of typical presentations in the natural sciences, physical sciences and humanities are not radically different. In the sciences most researchers become familiar with what is called the IMRaD structure, meaning "Introduction, Method, Results and Discussion" for both presentations and articles.

Certain areas of the humanities use that same structure. However, if you're working in a field such as philosophy or cultural studies you may write and present in what is sometimes referred to as a "discursive" mode: you present a long argument using almost entirely words, with little or no numerical data. In that case, you may still describe your method because you might be using a particular theoretical approach. As for the results and discussion parts, they may be together... it's all discussion.

But apart from that, the structure of presentations is not so fundamentally different between the humanities and the sciences. Why? Because the basis is the same: you're trying to support an idea, answer questions, through a logical organization of evidence.



## **Brief Summary of Parts**

Here is a short outline of parts. It's not a set of rules and the order is not rigidly fixed. This is just a rough guide based on common structure to help you get started. We'll go into it all in more detail later.

## **The Title**

It simply tells the audience what your research presentation is about. It <u>doesn't</u> need to be the same as your official research project title and you should not try to impress the audience with technical jargon. It's most important that your audience can understand it, so it helps them decide whether to attend, then what to expect.

## Background

This gives the audience the general context of your research. It should begin with a field of view that suits your audience: in the case of an outfield audience, broader and connected to the real world you share with them. Describe a <u>situation</u>, usually in the present, but also possibly past and future.

### **Motivation**

<u>Why</u> are you doing this research? Identify a problem that needs to be solved or a potential you are trying to help achieve through your research. Explain the issue's general <u>importance</u> for the world, and why your specific research is needed by referring to previous studies and a <u>research</u> <u>gap</u>, which means a subject that has not been investigated before.

## Aim/Idea/Question

This should be a simple and clear statement of your research purpose. Ideally, it would include your own position that will be supported by the research. If possible, make this a direct statement (thesis statement). If not, there should at least be a research question to be answered, and a possible answer (hypothesis) tested through your research, and if your research is complete, revealed in the presentation.

## Outline

Tell the audience **what you will be telling them** about in the presentation. It may not be needed if everyone is presenting using the same format (such as IMRaD) and you have completed your research. If you will not be giving results, you definitely need to let the audience know here or elsewhere in the introduction, and why.

## **Method/Theory**

**How** will you support the idea or test the hypothesis/question? Is there some existing theoretical or conceptual basis you use to guide the research? If so, give a level of detail suitable for your intended audience. If you are testing through surveys or experiments, what subjects (people) or materials or equipment will you use?

## **Results (IMRaD)**

Display, describe and basically explain the data you have gathered through your research.

### Discussion

For **<u>discursive presentations</u>**, this is the main supporting body of your presentation. Bring together the key information in a logical argument that supports your thesis.

For **IMRaD** presentations, **make the results meaningful** to the audience by focusing on key data. Connect specific results clearly to the research thesis/hypothesis/questions in the Aim section to provide support for them.

## Conclusion

<u>Summarize</u> what you set out to do and <u>what your research has achieved</u> in general terms. Use this time to also remark any <u>limitations</u> of your presentation. That can protect you and also launch you into brief mention of <u>future study</u> plans or recommendations.

Conclude with some final remark about the **<u>importance</u>** of this research in terms of future research and especially applications in the real world. You don't have to speak like a marketing manager, but try to finish on a positive note.



## Your Best Title: Consider Your Audience

Researchers often learn what a presentation title should look like from seeing presentations by their senior colleagues. That makes sense, but be careful... what you see in your lab or research group may not be suitable or effective outside that narrow context, such as at an international conference.

For their presentation title, new researchers often simply use an official title of their research, or maybe the title of an article they are publishing from the same research. Inside your research group or specific field, that may be fine since everyone is likely to understand, but as soon as you step outside that narrow context, the situation can be very different.

## The main functions of a title are to:

- 1. attract an audience to your presentation. They will decide whether to read your abstract and then hopefully attend your presentation based on this.
- 2. begin navigating your audience through your presentation.

### The first questions you have to ask yourself are always:

- 1. "What kind of title suits the conference?"
- 2. "Who are the audience I want or expect to attend?"
- 3. "What do they (NOT) know?"

First consider the scope of the conference, the level of specialization. The organizers may want you to be highly technical or they may prefer you to make the title attractive to a broad audience. Read the conference "Call for Papers" carefully and check previous conference presentation titles to give you some idea.

If some or many of your expected audience are not in your specific research field and may not be familiar with the new science or ideas you're working with, this can be a challenge.

Now, you may think, "OK, the audience won't understand the title, but it 'looks professional' and they will hopefully understand when I explain it all later in the presentation." This is NOT a good idea. Remember, the audience is firstly using the title to decide whether to attend your presentation: if they don't understand it, they may not even attend.

At the beginning of your actual presentation, if the title is not helping the audience to navigate your presentation from the start, it's wasting precious time. This is a big difference between a presentation title and a journal article title: in a presentation you don't have time to waste.

### The most common problems with research presentation titles are:

- 1. too long
- 2. too many unfamiliar technical words for the intended audience
- 3. the importance of the research is not clear to the audience
- \* Sometimes you need technical language, but don't try to impress an audience by using jargon.

#### Adapt to your audience

Here's an example of a presentation title based on a journal article title for specialists:

## "Effects of bacterium mediated transformation of musa kiiro cultivar leaf epidermis with AQPsr71 for low precipitation stress conditions" (17 words)

That's probably useful for a narrow 100% specialist audience. Fine. But how can you make a title useful for an "outfield" audience? Here's an alternative title for <u>a broader audience of non-specialists</u>.

## "Towards drought-resistant banana plants: genetic transformation of leaves for a dryer climate" (13 words)

#### The above example shows there are various ways to make the title useful for a broad audience.

1. Make the title as short as possible by removing specific details that are not required for a basic understanding of the research. Also, consider using a "title: subtitle" format to make the main point clear.

2. Remove unfamiliar technical words or replace them with familiar words... even if they are not so specific.

3. Include a very basic general aim of the research (例: "towards drought-resistant banana plants") so the audience immediately understands the research purpose... even if your specific research task is much narrower and will only make a small, indirect contribution to that general aim. At this point, the more general and understandable the aim, the better it is for the audience.

#### **Compromise is OK: aim for balance!**

Sometimes, you may want, or expect, an audience that includes both <u>specialists and non-specialists</u>. Then you might try a **compromise** (妥協). One technique is to make a main title understandable for everyone, then give a subtitle specific enough for the specialists.

## "Towards drought-resistant banana plants: genetic transformation with AQPsr71 for leaf epidermal enhancement" (12 words)

Here, everyone understands the basic aim of the research, and the specialists gather some specific knowledge.

So, don't just try to look and sound "official." Consider your title carefully as communication. Begin by thinking about the conference scope and the audience—what they (don't) know, what they will want to know.



## **Introductory Sequence**

How you begin your presentation depends very much on your audience: whether they are specialists (infielders) in your research field, generalists in your area, or "outfielders" who have little background information and technical knowledge. Infield presentations are usually the easiest for introductions because your audience already has a lot of background and they probably understand the importance of your research.

The sequence below is not a set of rules. There is definitely room to vary the order. The important thing is to give information to the outfield audience in a logical sequence that allows them to gradually gain the knowledge they need to understand your project aim. You have to guide them carefully on a journey from a shared world into the complex depths—and difficult language—of your individual research.

## **1. Self-introduction**

Feel free to say something familiar, even if it's just "Hello". It's best to begin with a human touch. Also, let the audience know your specific research field and possibly your position in the research cycle (if not here then by the time you give your outline).

## 2. Background

If you're talking to an outfield audience, start in the "real world," that is the broadest possible context of your research in its relation to the world that others in the audience can relate to. You may almost never think about this world when you're researching, but you need to provide this real word context in order to connect with the audience in a shared world, and to show the importance of your research. Make it as concrete as possible. Photography related to that "real world" is the most efficient and effective way to make that context clear. You may also explain any key terms that are required for the audience to understand your general research aim. (But only explain the terms that are necessary.)

### 3. Motivation: a problem or potential

Based on the background, describe a social, technological or environmental problem you hope to contribute to solving, or a potential benefit you hope to realize through your research project. This shows general <u>importance</u>.

## 4. General research aim

Based on this issue, state your general purpose. Even if your research is very specific and only a small part of a bigger project, connect it to the bigger picture. If your research is purely theoretical, describe the research gap that you hope to fill. (A "research gap" is something that has not been researched before.) Again, in this way try to make the <u>importance</u> of your research clear. If possible, state a general hypothesis.

### 5. Outline

Briefly describe the flow of the body of your presentation. It's very important that you here let the audience know your position in the research cycle and whether they can expect to see research results. If you're early in the research cycle and don't have results then you need to make it clear you will be focusing on background and not providing those details.

## **Example Introduction (Outfield)**

## **1. Self-introduction**

Hi everyone, I'm Sakashita Yukiko. I'm a first year Master's student in bio-agriculture specializing in plant bioengineering.

## 2. Background

Look at this photo. This is a banana tree on a plantation in East Africa 10 years ago. Bananas are an important food crop there, mostly for domestic consumption. This is a common type called the kiiro banana.

## 3. Motivation: a problem (or potential)

Now this is a kiiro banana tree growing on the same plantation last year. See the difference? You can see the recent banana tree's leaves look a lot less green and healthy. In recent years, there has been 36% less rain in this area and it's been hotter, possibly due to global climate change. According to Koite (2021), drought stress has caused banana production to fall by 43% over the past decade, with serious economic impacts.

### 4. Research aim

My research aims to help make banana trees that can stay healthy in a hotter, drier climate to support future banana farming. My project is studying whether a gene called AQPsr71, related to water transportation in plants, improves leaf function in banana plants under drought stress conditions.

## 5. Outline

So, here's an outline of the body of my presentation. I'll give some more detailed background on the banana plant situation in a changing climate, referring to previous studies on plant adaptation. Then I'll describe the method I used to test the effect of the AQPsr71 gene, the results I obtained, and what they mean.

\* This introduction would be around 2 minutes long, a good length for a 10 minute presentation.

In an infield presentation, the introduction would be more direct and probably shorter. It would probably also contain more of the technical language that your colleagues are familiar with, allowing you to give more detailed and specific explanations from the beginning. It would probably contain more specific research question statements.

## Try to Have an Idea / (Hypo)thesis

As mentioned elsewhere, the organization of your presentation depends on your aims and where you are in the research cycle when you present.

Let's begin with the easiest situation: you've completed your research and have already published or you're about to do so. You're basically presenting in order to "spread the word" and get feedback, suggestions. So what is the word you're going to spread? It should be a thesis statement.

A thesis statement is basically saying what the main point of your research is. It requires you to think hard to express as briefly and simply as possible what it is you are saying based on your research. Ideally, it would be good to say this in a single sentence and have that statement on a single slide by itself so it's clear to the audience what it is and how important it is. In fact, that statement should provide the point around which your entire presentation is structured. As in an article ( $\hat{m}\chi$ ), everything in your presentation is devoted to supporting that statement.

The great thing about a thesis statement is that it gives your presentation a focus and motivation, both for you—you want to demonstrate why the idea is a good one—and for the audience—they now know what you are trying to prove, so it helps them make sense of the information you're giving them.

Having a thesis statement can make preparation of your presentation much easier. A common problem we have with presentations is that because of the time limit we have to make difficult decisions about what to include and what to cut when editing. Most of us find cutting is the toughest part. We've worked hard to get this information, and we may feel that giving as much detail as possible will impress the audience with our diligence. When you have a clear, precise thesis statement, you can ask yourself this key question when you're editing and trying to decide whether to cut a part: Do I need this information in order to support my idea in some way, or is it just incidental data—interesting or impressive, but not necessary? If it doesn't help support your main idea, or at least clarify it, you may be able to cut it (and make it available outside your presentation).

There is another important benefit of a clear thesis statement: it will help you get useful feedback. Because that statement gives the point of your presentation, the audience will tend to give more focused questions or comments. They are more likely to relate to your main idea and not to some minor issue that is not your main concern or interest. Most importantly, the audience will be better able to test your idea in their own mind if they know what it is. This is why it's best to have the thesis statement near the beginning of your presentation where possible.

## What if you're not confident of your idea?

What if you're not at the end of the research cycle, so you don't have an idea, a thesis you're very sure is correct. As you're researching you almost certainly have a rough idea of what you're looking for even if you have no idea whether it's right or not. But as you progress you are heading somewhere. It may be guided by a simple question: Does the sun really revolve around the earth? When Copernicus was doing his research he must have had some doubts about whether the earth was the center of the universe, like most people in his time believed. At some point, somewhere in his mind, the idea must have arisen in his mind that most people were wrong and he must have played with the idea that the planets were revolving around the sun. He didn't know it for sure,

so it wasn't a thesis to begin with, but a possibility, a supposition or hypothesis (仮説). But that guided his research. He could test certain things, look for certain phenomena in order to verify if he was on the right track.

Now, can you build a presentation around a hypothesis, an unverified idea? Absolutely. You just need to be clear with the audience that you haven't proven the idea is correct yet. In that case you need to use suitable language, the expressions that show how confident (such as "We strongly believe...") or unsure (such as "It is possible that...") you really are. See the page of expressions for indicating confidence levels and uncertainty in the "Words" section of this book.

Why state something you're not sure of? Same as with a thesis statement—it gives focus, meaning and motivation to your presentation. So, wherever you can, try to give a clear statement of your idea, and again, give it a slide by itself so it's obvious to the audience that this is the central point of your research and your presentation.

## What if you have NO idea?

As mentioned above, most researchers have ideas floating around their minds about what they're going to find. At the very least they have a question or questions, and if you have questions then you probably have possible answers wandering around up there in your brain too.

So, if you're very early in your research cycle when you present, at least tell the audience of a question or 2 that you want to answer, and don't be afraid to speculate aloud. Why? Because if you speculate, you're more likely to provoke useful input from the audience.

Again, try to think of a single grammatically complete sentence (S+V+O) that states a point, even if you have to use language to give some level of uncertainty (nuance) to your discussion.

Here are some possible ways to begin a statement of purpose when you have no specific idea:

1. I want to answer this question: ...? (When you have a question but no answer yet.)

2. I want to analyze... because... (When you are doing exploratory research and have no clear specific question/hypothesis yet.)

## A question to be answered through results?

In some fields, and at some conferences, there is a customary structure in which the presenter, after giving some background, raises one or more **research questions**. These are used to guide the research method and provide a focus that is reflected in the results. In science, they might then present the methods, results and discussion (analysis) before giving answers.

There are 3 good reasons why you might want to follow the custom:

1. If you structure your presentation differently, you might just confuse people.

2. If you structure your presentation differently, people might think you're weird!

3. Beginning with a question and moving towards an answer creates suspense, like a drama, so it keeps the audience interested.

Personally, I don't want to encourage you to confuse an audience, make them think you're strange, or bore them, so I recommend you do what you think is best based on your context, knowledge and experience.

Still, if it's possible to state your thesis or hypothesis in the introduction of your presentation, then I recommend you consider it for the reasons mentioned earlier. Most importantly, it allows the audience to better test your idea if they know what it is exactly from the beginning. The presentation becomes more like a real test than a mystery story. Also, stating your main idea up front is likely to have more impact and this itself may help to get the audience's attention and keep it.

## "I will Introduce..." is NOT a good start

The phrase "I will introduce..." is often used by Japanese researchers, in part because the term 紹介, which basically means "introduction," is often used here. In research presentations, even early in the research cycle, I don't recommend using this phrase. Why? Because it suggests, "I'm just going to give you information." Some researchers actually like that, because it seems safe: "If I don't present an idea, just information, then I can't be criticized!" But that's very negative thinking. More importantly, it lacks a focus, a purpose and motivation for the audience. In our digitally connected world today, we have too much information. What we need is a good reason to make us decide to commit to listening to or viewing information. Your main idea can do that.

So, be a little careful, and **avoid saying more than you believe you can support, but have a point and purpose, not just information.** Keep it brief and say it. Then explain it as best you can through your structure, flow and design.



## **Stating Importance**

"Importance" (sometimes called "significance") is one of the most important points in a presentation, yet it's a point presenters often miss or misunderstand.

## What is importance?

It is basically the reason, the motivation, for the <u>audience</u> to listen to you. This is why it's best to state it <u>directly</u> near the <u>beginning</u> of your presentation and probably at the end. It's not the main idea and it is not the same as "support" for your idea. There are 2 basic types.

### **1. General importance**

This is the importance of your field of study broadly speaking. For example, imagine that you're working in food science and your main idea is "Bananas deliver varied nutritional elements efficiently." General importance might be something like "Bananas are one of the major staple crops internationally." It is not related to your idea specifically. You are more likely to use the general kind of importance when you have a non-specialist "outfield" audience. These people may not know how important bananas, and banana research, are; on the other hand, an audience at a "Banana Research Symposium" would probably already know this, so in that case you might not need it.

### 2. Specific importance

This is the importance of your specific research, the possible or actual implications from your actual or expected results. Take as an example the same main idea as above, "Bananas deliver varied nutritional elements efficiently." You could state that the importance of this finding is that "Banana imports could be a quick method to address serious and urgent nutrition problems in certain areas." This is an implication related to your specific research.

You could use both of these types of importance and you can have more than one of either. But if that's not suitable or required, you should try to include at least one statement of importance in your presentation, ideally in the introduction in order to motivate the audience and ideally at the end too.

#### Why do we often forget to show importance?

1. You don't really know why it's important: "Someone told me to do it, so I'm doing it." or "I'm interested in it, so I want to talk about it."

- \* Neither of these is a reason why the <u>audience</u> should listen to you.
- 2. In your lab everyone already knows why it's important.
  - \* Fine, but when you present <u>outside</u> your field, you may need to make it clear.
- 3. You think it's obvious to anyone, so don't need it: "Even a monkey could guess the importance!" \* It might be obvious to you, but it's probably not clear to the audience.
- 4. You want to be modest.
  - \* Modesty is generally a good thing, but here it's not about you, it's about the audience.

5. Your main idea contains importance.

For example: "The increasing number of bald people is a <u>serious social problem</u>." \* This is OK. But make sure you continue to say it <u>directly</u> in the presentation.

## **Common forms of importance:**

- There is a common element that affects many people or environments. Main Idea: "We believe regularly eating bananas increases intelligence." Importance: "Bananas are one of the most commonly eaten foods around the world."
- This issue has not been researched/discussed before. (This is called a "research gap.")
   Main Idea: "We believe regularly eating bananas increases intelligence."
   Importance: "No research has been done on the effects of banana eating upon intelligence."
- We have limited resources/time/money.
  Main Idea: "We believe regularly eating bananas increases intelligence."
  Importance: "We have <u>limited</u> food production resources, so we need to consider what food we buy carefully."

4. There is a great potential/need for positive change.

Main Idea: "We believe regularly eating bananas increases creative intelligence." Importance: "Humans are becoming more stupid at an alarming rate." "More intelligent people will probably make a better society.

\*If you are quite early in the research cycle and don't have lots of support for a main idea, you may spend more time discussing importance (along with background). See the "Timing Issues" section.

## **Phrases for Stating Importance**

#### **Communicating value and benefits**

- This is important because...
- The significance of this is...
- So, the key benefit is...
- One of the main advantages is...
- What I like about this is ...
- The great thing about this is ...
- This is an area that has been really neglected...
- I think this has implications for ...
- This could make a useful contribution to...
- What we've found is really interesting.
- I think we have found a radically new solution for...
- I think we have found a truly innovative approach to...
- I think we have found a novel way to...
- We are excited about our results because...
- We are sure that this will lead to ...

## **A Clear Outline**

Outlines are not always needed when presentations are following a standard format and especially when you're presenting to people who are specialists in your field. However, outlines can be useful because they give a map to the audience that helps them to follow your presentation throughout. You can keep referring back to this outline if you like to help them stay in touch with your flow.

A problem with outlines is they tend to just list the points, which makes them quite boring. So, try to give logical connections between points to create a smooth flow. See B below.

## A. Generic Outline

So, here's an outline. I'll give some background, followed by the method, results and discussion, then limitations and future studies.

\* If all presentations at the conference use the same structure, then this outline is not useful.

## **B. Logical Flow Outline**

So, here's the flow of my presentation. First, I'd like to explain <u>why</u> we began to think there might be a connection between eating bananas and intelligence (Background). Then I'll tell you about the experiment that we did <u>in order to</u> see if there really was a connection (Method). Next, I'll show you the data we obtained (Results). These provide strong evidence that bananas do indeed raise intelligence, and I'll attempt to explain <u>why</u> by discussing relations between certain nutritional elements and neural activity (Discussion). Finally, I'll look at some limitations in our present study and what we plan to do <u>in order to</u> overcome them.

\* Try to use phrases that directly state the logical connections between parts.

## When should you give the Outline?

In general, don't begin your presentation with an outline. Why? Two reasons.

1. The audience may not know enough about your topic yet, so the outline doesn't really make sense.

2. It's a rather boring, robotic way to start a presentation, which may immediately put your audience to sleep.

On the other hand, the outline shouldn't be too late. Why?

1. Because it's just weird to say what you're going to do when you're already halfway through your presentation.

2. Because the audience really wants to know where you are going to take them early on.

So, don't start with the outline, but try to give it <u>within the first 25%</u> of your presentation. Sometimes, the outline comes after the main idea has been introduced, so it could mark the end of your introduction.

You <u>don't need to include in the outline things you've already done</u>, like basic background and importance for example.

You may not need to include "Conclusion" in your outline. We guess you're going to conclude.

If you're using a standard IMRaD structure for people familiar with it, you can just say "I'll be following a standard IMRaD structure" or "I'll be following a standard Method, Results, Discussion" flow."

\* For <u>Outline Slide Design</u>, see that topic in the <u>Slide Design</u> Chapter.



Beatrice Murch, CC BY 2.0, via Wikimedia Commons

## **Body Sequence**

As with the introduction, the body of a presentation will vary depending on the kind of audience you have. Again, let's use an outfield presentation model, because that's the most difficult. Keep in mind, too, that this will also vary depending upon the field in which you work.

## 1. Method

The methods section varies according to the specific field. In some humanities research there may not be method or results sections because there is no experiment or trial. However, in those cases there may be detailed theoretical discussion.

There are 2 common structures for method sections.

1. Studies with human subjects as in medicine and the social sciences: these will often include

a. the number of participants (subjects) and numerical categorizing of the subjects in terms of their location, age, gender, race, education, occupation and so on. Also, how were the subjects selected?

b. description of the investigation procedure, such as laboratory tests or surveys. In the case of surveys, the kind of questionnaires should be stated and even exemplified.

- c. method of data analysis
- 2. Experiments with organic or inorganic materials: these will typically include descriptions of:
  - a. materials and/or equipment
  - b. procedure
  - c. method of data analysis

In either case, you should try to give as much <u>useful</u> detail as possible in the time you have. Also, try to show images related to the study, especially the equipment used. If it is allowed, take your own photographs for this purpose.

### 2. Results

Of course, this varies with the field too. The important thing is to keep in mind that a presentation is not the same as a journal article. Your audience probably won't have time to look at all of your data while you are presenting. So, you have to focus on the most useful results for supporting your hypothesis, answering your research questions. Don't dump data to try to impress the audience with your hard work. If you want them to be aware of the amount of data you have, then direct them to a website (through a QR code for example) or handouts, or tell them you have more detailed data available that can be shown during the Q&A if they want.

If you have more than one research question you may choose from different sequences:

#### Sequence Type A

Research Questions 1, 2, 3
 Methods 1, 2, 3
 Results 1, 2, 3

#### Sequence Type B

1. Research Question1, Method 1, Result 1

- 2. Research Question2, Method 2, Result 2
- 3. Research Question3, Method 3, Result 3

Sequence Type B is usually the easiest for an audience to follow because it requires less remembering. But if the methods are the same or very similar, that might not be an issue. So it's best for you to decide this based on your situation.

### **3.** Discussion

The discussion again depends on your context and how much explanation the audience needs. But in any case you should do your best to ensure the audience understands what the results mean, how they connect to each other and to your research questions, aims.

Match your research results directly with the research questions.

Match the research hypothesis directly with the research conclusion.

\* That is, don't expect the audience to remember your hypothesis and research questions.

## There is an example body sequence on the next page.



Mompati Dikunwane, CC BY-SA 4.0 Wikimedia Commons

## **Example Body Sequence**

\* a more clearly outfield version is given later

#### 1. Method

We injected AQPsr71 genes previously extracted from sub-suharan potato plants by the Ishihara Laboratory into cells of kiiro banana using the bacterium mediated transformation technique. We grew 20 transgenic plants in Petri dishes. As their roots, shoots and leaves began to grow, we transferred them to larger vessels. A control group of 20 untransformed plants was cultivated from seedlings at the same time under the same conditions.

After 1 month we transferred the transformed plants and the control plants to a greenhouse on Nagoya University research property in Aichi. This allowed us to simulate the typical atmospheric and soil properties of the East African banana plantations, as recorded by Bamada (2020). This meant changes in air temperature, humidity and light in daily cycles, which we achieved through use of an Agrosim ESS environmental simulation system. This allowed remote monitoring, and we visited the site once per week through the research period to conduct measurements.

The plants were grown for a total of 6 months. From the beginning of the third month, we simulated drought conditions by increasing temperature and reducing water supply, as you can see in this graph.

Over this period, we monitored the growth of the plants. We assessed the plants' health through measurement of their height as well as their leaf length and width. We measured the leaves just below the top layer on all plants. We also photographed the leaves and recorded their color using the Valadein plant color-coding system. The health of the plant leaves can usually be determined through greenness. Yellowing indicates problems with water transportation through the leaves.

#### 2. Results

We collated the various data over the study period and took average results from the transformed plants and the control group in order to make comparisons between the two. Let me show you the results through graphs and photo images...

#### **3. Discussion**

These results show only minimal superiority in the height of plants transformed with the AQPsr71 gene, but a very significant increase in two dimensions of the leaves: their length and width. This was accompanied by a deeper green color of transformed plant leaves compared to the control plants. Since the size of leaves and the color have in previous studies been strongly correlated with water transportation and retention capacities (Fole 2003), there is strong evidence here of improved resilience under drought stress conditions.

It appears that the AQPsr71 gene produces stoma and upper epidermal characteristics that are able to compensate for increased thermal and water stresses experienced under typical drought conditions.

## **Concluding Sequence**

As in the other parts of your presentation, the sequence you follow in the conclusion can be varied. In fact, in some guides for research presentations, the "Discussion" section is treated as part of the presentation body, while in others it's considered to be part of the Conclusion. Don't think too much about that; it's the sequence that's important, not so much which part we consider each part to be in. Again, the important factor is providing the audience with a clear logical flow.

Firstly, I should mention that Conclusions are a consistent weakness in presentations, usually because the speaker is rushing or perhaps because they simply don't understand how important the conclusion is. So, what's in a Conclusion and why is it important?

### 1. Summary

Because time is limited, the summary is a part of presentations that quite often gets cut, sometimes during preparation and more often during the presentation itself as the speaker is over-time. That's a pity, because the summary doesn't need to take a long time, but it can really make the presentation stronger by tying the preceding parts together.

You don't have to review the entire research project in your summary. If you can, though, it's good to mention:

- 1. The general problem you set out to solve or the potential you tried to realize
- 2. The research question(s)
- 3. The method... in very general terms
- 4. The answers to the research question(s)

2 and 4 are the most important, unless you have already stated them together in your discussion of results. It's really effective to restate your research question(s), perhaps using a copy of the slide you used for that earlier in your presentation. Then clearly and simply answer the question(s) based on your research results. It's important to do that because the audience may have forgotten your initial question(s). This summary provides clarity and completion. The audience can see directly what you have achieved.

### 2. Limitations

Stating limitations of your research is very important. For example, if you have done a clinical study using a qualitative method but used only a small number of participants from a narrow demographic (population range), you should definitely acknowledge that after giving your results. This shows you have already considered weaknesses in your research and could save you from some harsh criticism from the audience during the Q&A. Be careful not to end your presentation with limitations; it leaves a negative impression.

### **3. Future Study**

Describing your future plans for research or suggestions for others to research can follow logically from your statement of limitations. After saying what the problems with the present results might be, you can suggest how plan to fix that weakness in future research, or how others might do that.

## 4. Future Prospects (Importance)

This is often missing in research presentations. In the case of infield presentations, it may not be needed, but for an outfield audience it's very important, since it will often connect to their real world experience and leave a forward-looking, positive impression in their minds.

## **Example Concluding Sequence**

#### 1. Summary

**Review problem + aim + method** 

So, let me briefly review what we've done. We set out to help develop banana plants for East Africa that will enable farming to continue successfully even as the climate becomes hotter and dryer. We transformed existing plants of the kiiro banana by inserting the AQPsr71 gene which has been shown to enhance water transfer within other plants.

Our research question was this: What is the effect of the AQPsr71 gene upon the drought tolerance of kiiro banana plants as measured through leaf formation?

**Our answer to that question**, based on measurement of leaf formation and overall plant health, is that the AQPsr71 gene produced only minor improvement in plant height. But leaves showed a marked improvement in size and color that indicated improved plant water transfer and overall

health. These are promising results.

**Answer question** 

## 2. Limitations

I should mention that the present study used a limited sample of just twenty plants. It was also done in an artificially controlled environment. Furthermore, we only have 6 months data.

## 3. (Continuing and) Future Study

**Overcoming limitations** 

So, we are continuing to monitor the plants to gain further data. The good news is we've just received a grant and permission to replicate the study on a larger scale on a banana plantation in Mozambique next year.

### **4. Future Prospects**

Extend, expand + inspire

It's too early to conclude that the AQPsr71 gene will secure the future of kiiro bananas in East Africa, but our results so far have given us hope. We're excited to find out if our research can contribute to food security and even economic development in that part of the world. The results could also have implications for other crops facing harsh environments with global environmental change.

## Referencing

## **Text Referencing**

It's important that you provide references for information you use that come from other people. That is, you need to show the sources of these elements in your presentation.

### Why?

There are 4 main reasons for giving references:

- 1. to give credit for input created by others: it's an ethical issue and most important.
- 2. to show that information you are using comes from credible sources.
- 3. to provide useful information about sources the audience may use for their own research.
- 4. to show that you have done sufficient background reading to support your research.

#### How?

The style you use to show references often varies according to the presentation context. It depends upon the research field and sub-fields, perhaps the country in which you are presenting, perhaps the particular style preferred by the conference organizers. Some may use a particular referencing style such as MLA, AMA, APA or Harvard, for instance. So, check to see if there is any specific information about this in the conference web site. Your own professor may have a preferred style, too, so check that before you present within your research group.

Because of these differences, it's not useful for me to give a lot of detail on this subject. But there are a couple of points you should be aware of from a communication perspective. As mentioned above, there are good reasons for referencing, but from a communicative standpoint it's not good to fill up your speech and slides with referencing information. The fact is, much of it will be ignored and if you give too much detail it is going to become a distraction in your presentation, creating more verbal and visual noise.

So, if the conference or presentation organizer has not ordered a certain style, consider using intext (or "in-slide") citations with a Reference or Works Cited section at the end of your presentation, on handouts, or available online to the audience. (But in some technology-related fields full referencing within slides may be preferred.)

The citation appears on a slide below the related quote or information from the source. It gives only basic information such as the author or organization, the year of publication, perhaps a page number. It might look like this: (Okumura 2021, p. 317).

This brief in-slide citation provides necessary source acknowledgment and information without taking up too much space on slides with complete details. Such details can take up a lot of space, especially if you want to make the font big enough for the audience to read and if you have more than one reference on a slide, and especially if you try to give web source information such as URL's. So, an in-slide citation is a clear and efficient design option.

With the in-slide citation, the audience may later gain complete details through a "References" or "Works Cited" slide, handout, or link (through a QR code on a slide) you provide them which lists full publication details related to all the citations. For example, a single reference on such a list for the in-slide citation for Okumura might look like this:

Okumura, Satomi. "A new approach to outpatient care for bipolar disorder patients," *Journal of Community-based Mental Health* 45:2 (2021): pp. 306-24.

In the case of showing a References / Works Cited slide to give details related to the in-slide citations, these are usually shown at the end of the presentation. Very often they are only shown for a few seconds. This is actually kind of ridiculous because the audience won't have time to gather any useful information from the slide(s); it is shown as a formality. If you do show the References / Works Cited slide quickly then say something like "If you would like a copy of these references, please ask me later, or ask me about any specific sources during the Q&A."

An alternative strategy is to leave the References / Works Cited slide showing during your Q&A. I don't recommend this because it's distracting and you may need to show other slides during the Q&A anyway, but you should make that decision for yourself based on what you think would work best for your specific audience and presentation.

### **Image Referencing**

You should give references for images as well as text. This is especially important when the images contain data, such as tables, graphs and diagrams; these may actually be included as textual sources because in a sense they are. But the sources of photographs, drawing, maps, and so on should also be acknowledged.

Here too, you should carefully follow any instructions given by the conference or presentation organizers. And, again, where there are no specific instructions, I recommend <u>not</u> giving full reference details on slides within your presentation.

Again, you can use a combination of in-slide citations and a detailed list of references at the end on a slide, on a handout, or online. This is usually titled "Image Sources."

In the case of images you use to illustrate points, but which don't contain research data, such as photos or illustrations, a format that is sometime used has no in-slide citation. Instead, it has an "Image Sources" list (slide, handout, online) which includes slide numbers (indicating on which slide each image was shown along with image titles and full reference details). Because there is no in-slide citation, it leaves a "clean" appearance on your slides. Personally, I recommend using in-slide citations for most photography, but where you are using stock illustrations, for example, this approach may be most suitable.

\* **Be careful with copyright**, especially when presenting outside the classroom. It can be time consuming, but make a thorough search to ensure you are allowed to show the images publicly and that you are providing adequate acknowledgement to the original source, not just to a website that has used that source (perhaps without acknowledgment). Be especially careful of websites advertising collections of "copyright free" or "free use" images. These are often misleading.

## **Template: IMRaD Presentation**

Cubtitla	
Subtitle:	
	INTRODUCTION
Backgroun	d Situation
Problem a	nd/or Possibility
Importanc	e (Here or after main idea, or both places. See section on import
Aim / (Hyp	o)thesis / Research Question (Write complete sentence(s).)
	METHOD

### RESULTS

**DISCUSSION (Meaning of the Results)** 

CONCLUSION

Limitations

**Future Studies** 

Final message (importance / applications)

## **Template: Discursive Presentation**

TITLE:
Subtitle:
INTRODUCTION
Background Situation
Problem and/or Possibility
Importance (Here or after main idea, or both places. See section on importance.)
Aim / (Hypo)thesis / Research Question (Write complete sentence(s).)
METHOD / THEORY

## DISCUSSION

CONCLUSION

Limitations

**Future Studies** 

Final message (importance / applications)

# Flow & Context

## Start in the Real World, Finish in the Real World

There are no absolute rules in presentations, but the above statement is something that researchers really should consider seriously when they are presenting, especially to **an outfield audience**. At the start of the presentation you should refer to the world outside your narrow research field in order to create a connection with the audience members who do not belong to your field. The real world is a place we share, and it is full of meaning and importance for all of us. So, that's why you should start there... and it's also why you should finish there.

If you finish your presentation with the specifics of your research, there's a good chance the audience will simply forget much of what you've done. That's because they don't really see how it relates to the world they live in and how it affects anything.

So, even though you're probably short of time, you really need to return to the real world implications, applications of your research. That often means "returning to the future" by talking about how this research could impact the real world. Even if your research is mostly exploratory or theoretical with no direct applications, think about how eventually the knowledge you are creating will affect the way we think, or the way things are made by others, in the future.

This doesn't need to be much more than a sentence or two, and you don't need to make exaggerated claims, just tentative suggestions. It makes a big difference to the impression your presentation will have on the audience. Oh, and it's best to use a real world **image** to reinforce this message.

And you should still definitely finish in the real world.



Dennis Tobar (user: Superzerocool) ,CC BY-SA 2.0 Wikimedia Commons

## **Create Flow with a Through-line**

We've spent a lot of time talking about presentation structure, and that's important. But if we think only in terms of structure, we can still lose the audience because the parts don't connect well and don't seem to be moving. This happens when there isn't enough logical or narrative connection and flow: which we sometimes call the through-line. A through-line is a consistent connection to a central idea, question or other goal running through your presentation, from beginning to end.

Think of how many presentations you've seen where the speaker basically says, "OK, now let me move onto my next part." Well, that's a clear transition, but what it lacks is a connection between the parts. It doesn't tell us this very important thing: Why? Why are you moving to the next part? Because it's the next part. Sure, but how does it connect to what you just discussed? Where are we going?

Let me give you an example. In scientific research presentations, following the "IMRaD" structure, after their introduction many speakers simply have a slide saying "Method" and the presenter may actually say something like "Now, let me move to my Method." Actually, sometimes the presenter just says "Method"... like a robot!



You could argue that the audience understands that the Method section is describing what was done in the research, so there's no reason to explain why you are giving the research method. Yes, but if you say instead, "So, let me show you how we tried to find evidence to support our idea" doesn't that create better logical flow? It's pointing out directly why we undertook the survey or experiment. It gives both logical connection and motivation to the presentation. This is flow.

To continue the example, what about within the method section? A commonly missing element in researcher presentations is explanations of why a certain method or theory was used, not others. It quite often leads to questions from the audience later about that. It's better to do it as you proceed. It might only take a few seconds to explain why and it keeps the audience engaged with your description of the research process—like they're participating themselves. Keep in mind, all of us are getting too much information these days. If your presentation is just "Here is some information. Next, here is this information. Now, let me give you this information" the flow, momentum, dynamism is lost.

The through-line is basically that connection and dynamism. In academic contexts is typically done through logical connections, but it can also be done (at the same time) through narrative connections, describing your research as a quest story. In fact, the through-line concept was first used in the context of dramatic storytelling. We'll come back to the storytelling issue soon.

In short, it's best to take the audience along for the ride, so from beginning to end...

## Describe and explain the movement of the arrow.



## Logical Flow: "Why" and "So"

Particularly if you're using the IMRaD (Introduction, Method, Results and Discussion) structure for a presentation, it's easy to think that you just need to fill each section with content. IMRaD already contains a fundamental logic. You have an idea, you formulate hypotheses and questions around that idea, you attempt to answer those questions through testing. You describe the testing in your Method section, you show the results, then discuss what they mean. Basically, this describes gathering evidence to prove or disprove an idea. That logic is built into the very structure of IMRaD. Isn't that enough logic?

In fact, it's partly because many researchers just fill the IMRaD boxes that so many audience members get confused and bored by presentations. The presenter jumps between the parts without properly connecting them. There are basic implied connections, but not much is said about them. There are lots of statements of fact, which seems very objective and scientific, but not much about the thinking that guides the process. What's lacking is logical flow.

The fact is, a good research presentation makes logical connections between the parts: how they connect to a main idea or question, how they connect to each other. For example, they explain the rationale for using this particular method. Presenters who are just filling the boxes—and perhaps rushing—often skip across the logical connections that they take for granted but which the audience really needs to hear explained. So, don't just think of structure, think of logical flow.

If you look at the section "The language of logical flow" in the "Word" chapter of this book, you'll see there are plenty of words and phrases to help you connect the statements, to make a sensible and interesting logical flow. See, too, the model script below in the present chapter.

There are two very simple words that you should keep in mind as you're preparing your presentation... and your research itself for that matter: "why" and "so."

## Why?

When you are describing a problem, briefly explain why it exists, why it needs to be solved. If you're not going to be reporting on results in the presentation tell the audience why. Explain why you used a certain method and not another. Tell the audience why you are showing some results but not others. Certainly, in discussing the results give suggestions as to why they occurred, the reasons behind the data.

In short, you should constantly keep that question operating in your mind: it will not only make you a better presenter, but it will make you are more inquisitive and thorough researcher.

It is actually possible to use "Why?" and other question words such as "How?" throughout your presentation. It breaks an otherwise boring rhythm and intellectually engages the audience. For example, speaking of the results you say, "Why did this happen?", then give a possible reason. As you discuss the method you used ask, "How did we test this?" Then launch into your description of an experiment.

## Don't say "and" when you mean "so" (or "because").

Researchers sometimes say something like this in presentations:

"The patients continually had difficulty standing quickly and we tested their sense of balance."

What the speaker should be saying is this:

"The patients continually had difficulty standing quickly, <u>so</u> we tested their sense of balance."

Even better:

"The patients continually had difficulty standing quickly, <u>so</u> we tested their sense of balance, <u>because</u> it seemed possible that..."

The clearest case for using "so" is making clear the logical connection between your research limitations and your future studies.

"The present study used a small sample, <u>so</u> we would like to collect a larger and more diverse group of participants."

So [I just used a logical connection], constantly ask yourself "why?" through every step of your presentation. And do that as you prepare your presentation, so that you will tell the audience directly the reasons for actions and events, not expect them to guess. It makes the audience's experience easier, and also more stimulating.

# See also the "Useful Terms for Logical Flow" section in the "Words" Chapter.



https://upload.wikimedia.org/wikipedia/fr/thumb/a/a7/Flow\_Logo.png/1200px-Flow\_Logo.png

## Narrative Flow: Research is an Adventure Story

How many documentaries have you seen about famous scholars or scientists? Sometimes, the story of how great new ideas or technology came alive are even made into drama. There's a reason for this. Research is a great story.

Look at the first diagram below. It's called a "narrative curve of action" and it goes back at least as far as Aristotle in ancient Greece. It's a way of describing a sequential pattern that an extraordinarily large number of stories—not just books or manga, but movies, even games follow. So it seems like this sequence is fundamental to the way humans operate. In fact, you could argue that humans are distinguished as a storytelling animal and this is their basic evolutionary story, the story of problems and their resolution, of possibilities (dreams) and their achievement.



Yes, it's the research cycle shown on a narrative curve, and look how well it fits in terms of describing the experience of researching: your initial wondrous introduction to the complex subject, finding a problem to work on, setting questions, creating a scheme (method) to find

answers and perhaps create something new, your growing tension (stress?) as you approach the results, what you discover and what it means, then where it leads next. Whatever happens, you go through a quite intense experience and you finish in a different place—not just practically but emotionally—from where you began.

#### So, what?

So, when you present your research as a series of parts, of boxes, and you don't connect the boxes logically you are covering over that story. This is why just filling the IMRaD structure boxes can create a boring experience for both you and for your audience.

You're not a professional storyteller or actor or movie director, and your presentation is not entertainment. But you don't actually have to remove the story from your presentation. Without becoming too dramatic, without acting like someone you are not, without changing the standard research presentation structure, and without using lots of unscientific language, you can tell the story of your research cycle.

How do you do that? You just connect the boxes with the logic of questions and answers that inspires and guides the research process. And, if you feel it's suitable, you include yourself (maybe your colleagues) in the story. We do that more now anyway since we're more likely these days to use the active form and "I" and "we" in describing and explaining, even more so in presentations than in articles.

This is **not** to say that you **should** do that, only that if you feel the context is right, you can. Sometimes you will see others doing it—presenting their research as a story—without acting, quite naturally, because to them research is a story... and because it can be both clearer and more engaging with that narrative thread running through the presentation.

The model script later in this chapter gives an example of this approach.



## **Timing the Flow**

## Why is Timing Important?

Running out of time is the single most common destroyer of presentations. Think of how many times you've heard presenters say, "I'm short on time, so I'll have to skip ahead," and then you see them scrolling quickly through slides to get to their conclusion. What a terrible waste, and what a terrible impression this conveys to the audience: they are not well prepared, they are poorly organized. So, it's important to time your presentation while rehearsing, and if you need to cut material, then do it. Don't try to speak more quickly!

## **Flowing Through Time**

#### How long should you spend on each part of your presentation?

There are no hard and fixed rules about how long each part of your presentation should be. The diagram below is just a rough guide. As usual, it depends a lot upon the context, such as how much the audience knows about your research field or where you are in the research cycle.

Here is a rough guide:



If you are speaking to an audience where many people are outside your specific area you'll need to spend more time on background to help them understand what you're doing and explain key terms.

## **Suggestions for Clarity and Understanding**

Most research presentations fail when the present hasn't first decided what their communication aim is. So, first, clarify your own aim

- If you only want to impress the specialists in your field... drive infield with detail.
- > If you want almost everyone to understand almost everything, hit wide for the outfield.
- If you want to reach the middle.... think and prepare especially hard... compromise

#### 1. Give yourself time.

Speaking and listening in a second language are difficult. So, give yourself time to breathe and think and the audience time to understand and think.  $\exists \phi \circ \langle \vartheta \rangle_{a_{\circ}}$ 

### 2. Difficult words (難しく言葉)

- a. Explain: Describe using language the audience already knows.
  - + may allow greater depth and detail in later discussion.
  - takes time.
- b. Simplify: Replace with known language.
  - + doesn't take time.
  - may limit further discussion.
- c. Cut: Does <u>this</u> audience need <u>this</u> word/information? If not, cut it. + may actually give you more time.
  - None!

#### 3. Difficult concepts (難しい概念)

- a. Images: a picture is worth 1000 words.
- b. Examples: make it concrete (具体的)
- c. Analogy (比較): compare it to something we understand easily.
- d. Cut: does this audience need this concept? If not, cut it.

#### 4. How can you know what other people won't understand?

- a. Trial and Error (試行錯誤しこうさくご): reflect on presentation failures.
- b. Test someone
- c. Imagine / predict (予想)
- d. Use common sense (常識).

#### While presenting:

Check understanding with sentences like this:

"Is that clear"

"Stop me if there's anything you don't understand."

"If there's anything that's not clear to you, ask me in the Q&A" (but that may be too late) Read faces, body language.



## **Presenting Outside Your Field**

How context affects your structure and flow



Naturally, when presenting to an outfield audience, you will need to provide more background and explanation throughout.

The problem is if you just give a lot of background at the start without giving some motivation and aim, it's boring for the audience. So, one effective strategy is to break your background into two parts. In the first part you give basic background to draw the audience into your research field and general problem. This will allow you to give a general aim of your study.

Next, you give them an outline, then provide more detailed background, preparing them to understand your specific aim and research question.

The diagrams below show by comparison how an outfield presentation can differ from an infield presentation in the organization and use of time. Basically, the structure is complicated in the outfield presentation because the audience needs more explanation.

## **Timed Structure Variations**



#### 68
# **Body Sequence (Outfield Version)**

As with the introduction, the body of a presentation will vary depending on the kind of audience you have. Let's look at an outfield version of the body sequence presentation model shown earlier. \* Parts 1 and 2 have been added.

### 1. Deep Background / Theory / Previous Studies

This section provides the detail that would have been too much to include in your introduction but an outfield audience needs. It has 2 primary functions:

- 1. give information necessary for the audience to understand your specific research question
- 2. show theoretical and/or research bases that give your method & results credibility

So here you may first fill in more detail about the present situation in your research area. If you are basing your work on theory, then you should make sure the audience will understand enough about that theory to make sense of your project. Be realistic and practical. Because you have limited time, you should only give the information required for the audience to understand your project and trust your method. You usually don't have time for the kind of comprehensive literature review you would have in a dissertation.

Another important function of this section may be to show a specific <u>research gap</u>. You can report that previous research has tried A and B, but there has been no study of C. This may lead logically into a specific research hypothesis, and from that you may devise a research question(s).

### 2. Specific Research Aim (Question(s))

Research questions are often (but not always) used to focus research supporting a hypothesis. If the research is completely exploratory, research questions should at least address a general research aim of better understanding some phenomenon.

You can have one or more questions, but you shouldn't have too many. It's rarely more than 4. The questions should be very clearly stated in the question form so that you may later provide clear and simple answers to those questions based on your research findings/results.

#### 3. Method

The methods section varies according to the specific field. In some humanities research there may not be method or results sections because there is no experiment or trial. However, in those cases there may be more detailed theoretical discussion.

There are 2 common structures for method sections.

1. Studies with human subjects as in medicine and the social sciences: these will often include

a. the number of participants (subjects) and numerical categorizing of the subjects in terms of their location, age, gender, race, education, occupation and so on. Also, how were the subjects selected?

b. description of the investigation procedure, such as laboratory tests or surveys. In the case of surveys, the kind of questionnaires should be stated and even exemplified.

c. method of data analysis

- 2. Experiments with organic or inorganic materials: these will typically include descriptions of:
  - a. materials and/or equipment
  - b. procedure
  - c. method of data analysis

In either case, you should try to give as much detail as possible in the time you have. Also, try to show images related to the study, especially the equipment used. If it is allowed, take your own photographs for this purpose.

#### 4. Results

Of course, this varies with the field too. The important thing is to keep in mind that a presentation is not the same as a journal article. Your audience probably won't have time to look at all of your data while you are presenting. So, you have to focus on the most useful results for supporting your hypothesis, answering your research questions. Don't dump data to try to impress the audience with your hard work. If you want them to be aware of the amount of data you have, then direct them to a website (through a QR code for example) or handouts, or tell them you have more data detailed data available that can be shown during the Q&A if they want.

If you have more than one research question you may choose from different sequences:

#### Sequence Type A

- 1. Research Questions 1, 2, 3
- 2. Methods 1, 2, 3
- 3. Results 1, 2, 3

#### Sequence Type B

- 1. Research Question1, Method 1, Result 1
- 2. Research Question2, Method 2, Result 2
- 3. Research Question3, Method 3, Result 3

Sequence Type B is usually the easiest for an audience to follow because it requires less remembering. But if the methods are the same or very similar, that might not be an issue. So it's best for you to decide this based on your situation.

#### 5. Discussion

The discussion again depends on your context and how much explanation the audience needs. But in any case you should do your best to ensure the audience understands what the results mean, how they connect to each other and to your research questions, aims.

# **Example of an Outfield Body Sequence**

#### \* Parts 1 and 2 have been added to the earlier version

### 1. Deep Background / Theory / Previous Studies

Now let me give you some more background on the study of kiiro banana plants in drought stress situations. The kiiro banana is native to this area of East Africa, which also happens to be suffering serious climatic changes, especially increased drought situations.

Genetic modification of kiiro banana plants for improved tolerance to drought conditions has already been undertaken by Watanabe (2015) and Lu (2016) using the gene AQPasx11, a protein

associated with water transportation in plants. However, in both cases there was no significant improvement. Therefore, the present study for the first time tested the AQPsr71 gene, taken from sub-saharan potatoes, to see if it has an impact on leaf formation under drought stress conditions.

### 2. Research Question(s)

What is the effect of the AQPsr71 gene upon the drought tolerance of kiiro banana plants as measured through leaf formation?

### 3. Methods

We injected AQPsr71 genes previously extracted from sub-suharan potato plants by the Ishihara Laboratory into cells of kiiro banana using the bacterium mediated transformation technique. We grew 20 transgenic plants in Petri dishes. As their roots, shoots and leaves began to grow, we transferred them to larger vessels. A control group of 20 untransformed plants was cultivated from seedlings at the same time under the same conditions.

After 1 month we transferred the transformed plants and the control plants to a greenhouse on Nagoya University research property in Aichi. This allowed us to simulate the typical atmospheric and soil properties of the East African banana plantations, as recorded by Bamada (2020). This meant changes in air temperature, humidity and light in daily cycles, which we achieved through use of an Agrosim ESS environmental simulation system. This allowed remote monitoring, and we visited the site once per week through the research period to conduct measurements.

The plants were grown for a total of 6 months. From the beginning of the third month, we simulated drought conditions by increasing temperature and reducing water supply, as you can see in this graph.

Over this period, we monitored the growth of the plants. We assessed the plants' health through measurement of their height as well as their leaf length and width. We measured the leaves just below the top layer on all plants. We also photographed the leaves and recorded their color using the Valadein plant color-coding system. The health of the plant leaves can usually be determined through greenness. Yellowing indicates problems with water transportation through the leaves.

### 4. Results

We collated the various data over the study period and took average results from the transformed plants and the control group in order to make comparisons between the two. Let me show you the results through graphs and photo images...

### 5. Discussion

These results show only minimal superiority in the height of plants transformed with the AQPsr71 gene, but a very significant increase in two dimensions of the leaves: their length and width. This was accompanied by a deeper green color of transformed plant leaves compared to the control plants. Since the size of leaves and the color have in previous studies been strongly correlated with water transportation and retention capacities (Fole 2003), there is strong evidence here of improved resilience under drought stress conditions.

It appears that the AQPsr71 gene produces stoma and upper epidermal characteristics that are able to compensate for increased thermal and water stresses experienced under typical drought conditions.

# **Presenting to a Knowledge-Diverse Audience**

## Finding the right level

Whatever the communication context, you have to understand who you are communicating with, right? This is especially important with research presentations because the content usually tends toward complexity, and because audiences can vary a lot.

Before you even begin preparing your presentation, think about where your audience stands on the presentation field.



We know an infield audience will expect more detail. We know an outfield audience wants less complexity and more explanation. But what do you do about the situation—quite common at conferences and in collaboration contexts—where the audience ranges from infield to far into the outfield? From a communicative viewpoint, this is your biggest challenge. How do you approach it?

#### Try to predict your audience

Firstly, though, how can you know what kind of audience you will have? (This is something you should consider even before you write and submit your presentation proposal/abstract. You may write the abstract in a way to get the kind of audience you want.) Your best clues are knowing the scope of the conference (which will be included in the "call for papers") as well as the organization running the conference. Next, is there something in the call for papers that indicates they are encouraging specialization of content, such as parallel sessions (at the same time) devoted to different specialized fields? On the other hand, are there hints for presenters to address people outside their field, such as a reference to "cross-disciplinary" or "interdisciplinary" in the call for papers? That could suggest that they are expecting people to move freely across different fields in both presenting and attending presentations... not just staying within their own field.

Also, once the conference program and abstracts are available, look at the session in which you are scheduled to present. How close to your specific research area are the other speakers? That could give you some insight into the knowledge range of the audience.

Apart from that, consult senior colleagues who have experience in the field and conference circuit. Also, check the abstracts from this and previous conferences online to see if they give any clues about the degree of specialization of presentations. If you're "in the dark" and really concerned about it, then contact the organizers in advance and ask them for advice.

### Different levels? Decide your target audience

When you are expecting an audience with a range of different levels of specialist knowledge in your area, you have a decision to make. Are you going to try to satisfy the entire audience, or "pitch" your presentation to specialists? This depends on 1) what you think the majority of the audience will be, and 2) what kind of input, feedback you most want to gather. Naturally, it is good to reach a broad audience, but you should be practical about reaching the "right" audience, those from whom you most want to receive input. In that case, you may need to make the difficult decision of accepting that some in your audience will not understand some, even much, of what you have to say. On the other hand, you might accept that infield specialists are going to have to be a little bored by some of your explanation designed to help outfielders. It's an important strategic decision.

#### Is compromise possible?

There are a couple of reasons why you might choose to pitch your presentation at a level that satisfies everyone to some extent even if it satisfies no-one completely: a) you're really not able to predict the kind of audience you will have, or b) you simply want to try to satisfy as broad an audience as possible, from infield to outfield. What should you do?

If you think about it, you have two basic strategic options. Let's shift metaphors from baseball to restaurant dining.

#### 1. The "All you can eat" buffet

With this approach, you make all the information—both the specialist detail and some nonspecialist explanation—available to the audience through a combination of your speech and the slides. Many speakers in the sciences tend to do this without much thinking about it. In particular, they include a lot of detail on slides that they do not actually talk about. It could be the data detail that specialists are looking for; less often it's explanatory diagrams that help the non-specialist outfielders.

In this method, the audience roams freely across your slides as you talk, taking what suits them, what they need. It seems like a perfect solution, and it does have some value, but it also has serious drawbacks: the disconnect between your speech and the slides creates a distracted audience, the slide design will be dense with information, and it can be frustrating for the audience if you switch slides while they're trying to make sense of all that visual detail. This latter problem happens quite often because you simply don't have time to let the audience casually work through the slide content in their minds. In other words, it's a buffet, but with a strict time limit: "all you can eat in 15 minutes." That's a recipe for digestion problems.

#### 2. The fixed main course with choice of deserts

Here, you estimate the midfield—the center or average level of the audience's knowledge of your subject area—or perhaps the level of your key target audience. You pitch your presentation, both the speech and slides, around that level of detail and explanation. But you prepare material for delivery outside of your presentation (desert). This could be slides and even speech that you can provide if people ask for it during the Q&A, whether requests for more supporting data or for

background explanation. Importantly, during your presentation you should tell the audience this information will be available to them during the Q&A.

That information could alternatively be delivered through handouts, though these are becoming less common. A more flexible and expansive method is to store the extra materials online and then give the audience a link, perhaps through a QR code on the screen, to those materials. You can even have different links for different audience requirements: the specialist data, the outfielder explanation. Now you're really taking care of the full range of audience needs.

The downside of the online desert menu? If the extra information is made available immediately, it could be very distracting as audience members engage with their smartphones or laptop computers instead of listening to you. You're going to lose that social immediacy that is one of the benefits of communication in real space and time.

Anyway, within this fixed main course strategy you have options. For instance, you could offer further detail in the Q&A, then in the Q&A also offer more online information. This will avoid the cyber-distraction problem while you're presenting.

In short, this strategy is probably better than the buffet approach. It makes for cleaner slides and clearer communication by making use of time outside the strict limits of the presentation.

### You decide

So, you have ways to satisfy a knowledge-diverse audience. Preparing the extra material is going to take your time, and if you're busy you may be inclined not to do it. On the other hand, that extra material can reduce pressure as you present. Above all, the more you put into preparation, the better the audience engagement with your work is likely to be, and the more you may receive from them. It's your decision.



Armineaghayan, CC BY-SA4.0 Wikimedia Commons

# **Presenting Early in the Research Cycle**

#### Why it's useful to present early:

If you are early in your research cycle and don't have results or analysis it can still be very useful to do a research presentation to get feedback from the audience that may help guide the research process. In fact, that's the main reason for doing presentations for your research advisers and colleagues throughout the research cycle.

### How this may affect your structure and flow:

In this case, because you don't have results, you can spend a greater part of your time on background, and also on importance, perhaps on method. That's OK, but if you have too much background from the beginning the audience is left wondering what the point of all this information is. They're waiting for you to get to some kind of point.

So, early in your presentation let the audience know your position in the research cycle and give them an outline of the presentation so they can relax and not expect too much. The outline could be soon after you've introduced your general research field or it could be a little later, but it should be within the first 15 or 20% or your presentation.

The most important thing is to get to your statement of idea, or at least a general research question, quite quickly so the audience is focused and motivated.

If you're worried about that, then look at the structure diagram below. As it shows, if you have a lot of background, then in the introduction just give enough background so that you can then give importance and some kind of main idea, purpose, question. (The audience wants that main idea, even if it's not precise, in the introduction; they don't want to wait too long.) Then, in the outline (概要), you say "Before discussing my research method, I'd like to give you more detailed background." Now the audience is happy (because they know where you are taking them) and you can spend more time on background and so on.



# **Model Outfield Script with Flow**

### **Example: The Effect of Banana Eating on Intelligence**

#### Task:

Next to the underlined phrases in this script, write one of the letters in brackets below (L, T, M or R) to show what those phrases are doing.

- (L) Logical transition/connection (cause/effect; reasons): "Why/because..."
- (T) Simple transition [例: "Next, I'd like to tell you about..."]
- (M) Careful, moderate statement: [例: "It may be that..."]
- (R) Researcher reaction: [例: "This was not as expected."

## **Introduction**

#### Opening

I'm sure you know what this is... a banana. How many of you have eaten a banana in the past week?

#### Importance

Bananas are an important part of human lives. They are a central part of the diet for millions of people in developing countries and one of the main products bought in supermarkets across the world.

#### **Previous Studies**

Bananas (of the *musa* genus) are often recommended in popular media articles as a source of various forms of nutrition, including nutrients supporting brain function. This is supported by chemical analysis by Adumbri (2014) among others.

#### **Problem / Research Gap**

But can we conclude from this that eating bananas actually has long term effects upon intelligence? No research had previously been conducted to determine this...

#### Aim

**So** ( ) our research set out to answer that question.

#### Thesis

<u>We were surprised at</u> ( ) the results of our study. We believe they show that bananas do indeed have positive effects upon intelligence and that these last for some time.

#### Outline

Here I will briefly describe how we did the study (method) and the results we got, then what we discovered in analyzing those results. First, though, <u>let me give you a little more background</u> ( ).

# **Body**

#### **Further Background**

Studies by Adumbri, Sakura and Malaga have revealed that the most commonly eaten type of banana, the Cavendish, contains 4 substances that contribute directly or

indirectly to cognitive function: vitamin B6, magnesium, tryptophan and glucose. The quantities in a single banana are not high, but they are significant. Still, this does not necessarily mean that simply eating bananas will make you more intelligent. No one could be sure. **Therefore** ( ), here's what we did.

#### Method

We asked for volunteers through a website connected to our university. We gathered 130 volunteers, but excluded three people who had eating disorders, **so**() we finally got 127 volunteers, 67 females and 60 males. They were aged from 19 to 63 years of age with a mean age of 34 and a median age of 29. They included professors, researchers, students, office and cleaning staff, 94% Japanese. A preliminary survey revealed that they ate an average of 1 banana every 3 days.

**In order to** ( ) get the baseline intelligence level of the participants we asked them to take an intelligence test, the Stanislavky IQ test (2016), before the trial. **To** ( ) make useful comparison possible, we then divided the participants into a test group and a control group with approximately the same average and range of IQs and with the same number of men and women in each group and the same mean and median age. Apart from that the selection was random.

The test group was asked to eat 4 Cavendish bananas a day for 3 months, the control group was instructed to simply continue eating as normal. We used a different version of the initial IQ test at the end of the 3 month test period. We decided that if a significant difference was found at that time we would conduct later tests at 6 months and 1 year after the trial period <u>so as to</u> ( ) determine if the effects lasted. <u>Now, let me</u> ( ) show you what happened.

#### Results

Here are the IQ results at the beginning. Both groups had an average IQ of 117. At the end of the study here are the scores. Control group 119. Banana-eaters 125. **This amazed us** ( ). **Consequently** ( ), in order to see if the effects were lasting we asked the participants in the test group (the banana eaters) to go back to their routine diet and we did a follow up IQ test at 6 months and got these scores: control group 118, banana eaters 122. Then we did another test at 12 months. The scores were control group 117, banana eaters 118. So we no longer had a significant difference.

#### Discussion

What does this mean? The results showed a strong positive correlation between eating bananas and scores on Stanislavsky IQ tests. These effects lasted beyond the period of intense banana eating, but they appear to subside over time so that intelligence returns to a normal state. Upon analysis, we found no significant difference between men and women, nor between young and old in terms of the amount of change.

At this point we cannot say precisely what the cause is. One thing that the lasting effect tells us is that it is probably not the glucose or tryptophan in bananas that produces the improved IQ <u>because</u> we know these tend to have only short-term effects. However, it is not clear whether the two other substances in bananas related by previous researchers to brain function, vitamin B6 and magnesium, are the reason. <u>We don't know enough</u>

( ) about the neurological effects of these substances at this stage. It seems possible

<u>that</u> ( ) the various substances somehow work together.

# **Conclusion**

#### **Restatement of thesis**

To sum up, this study had one very interesting finding. There are strong indications here that bananas do have some relatively lasting effect upon intelligence.

#### Limitations

Of course, there is a lot of work to be done. We understand that our study population was quite small and homogenous in terms of cultural background.

#### **Future Studies/recommendations**

**For that reason** ( ) we would like to expand the study to populations beyond the university and beyond Japan. We would also like to work with researchers in neural biology to get a better understanding of why this effect may have happened, what chemical processes are involved and how we can design experiments to learn more. Also, similar studies with other foods might be undertaken and comparisons made.

#### **Importance / Applications**

Since bananas are such an important part of the global food economy, if we can replicate these results it could have quite a big impact on international food culture.

# Template: outfield completed research IMRAD Presentation

TITLE:
Subtitle:
INTRODUCTION
General Background Situation
Problem and/or Possibility
Importance (Here or after main idea, or both places. See section on importance.)
General Research Aim
Outline
Further (Deep) Background

**Specific** Research Aim / (Hypo)thesis / Research Question (Complete sentence(s).) METHOD RESULTS **DISCUSSION (Meaning of the Results) CONCLUSION** Limitations **Future Studies** Final message (importance / applications)

# **Template: Outfield Research-in-Progress Presentation**

WORKING TITLE:
Subtitle:
INTRODUCTION
Background Situation
Problem and/or Possibility
Importance (Here or after main idea, or both places. See section on importance.)
General Aim / (Hypo)thesis / Research Question (Complete sentence.)
Outline



# Words 役立つフレーズ・表現

# **Choosing Words for Clarity**

Especially at international conferences, but even within research groups these days, people are communicating in their second or third language. That's often English. Listening in a language you don't use most of the time is difficult, and it gets much harder when the subject is research: there are more complex words and they are tied to really complicated ideas and systems. If you're listening to a presentation from the edge or outside of your field, that adds another level of difficulty.

Our goal as presenters is usually to gather as much input, feedback as possible from the audience, so we want to make sure as many of them as possible understand, right? What can we do to make that happen? Here are some suggestions. All of them require you to think about what the audience knows, what they need to know from you, and what you most want to tell them: your point.

### Use the simplest word that fits

Stay focused on communicating the content. Sometimes technical language is needed, and if the audience knows it already, that's not a problem. But don't try to impress the audience with your vocabulary. If there's a word that has the same meaning (or close enough for your specific purpose) that is more likely to be known by your listeners, use it. Obviously, this becomes more important for outfield audiences.

If a word will be too difficult for your audience, you have 3 choices. Keep these in mind and run through them when it's decision time in your preparation.

a. Replace it... with something that is close enough and simpler. It's the quickest option.

b. Explain it. This may take valuable time. But it could give you more freedom and allow greater depth once the explanation is done.

c. Cut it. If there's no good replacement word, and you don't have time to explain it, ask yourself if it's absolutely necessary for you to talk about this in your limited time.

#### Use active grammar more than passive grammar

It used to be that passive grammar was preferred in scholarly writing, especially the sciences, because it removes the subject ("I" and "we") and thus appears more objective. But there has been a trend toward the active form—including using "I" and "we"—in recent decades, with good reasons. Firstly, speaking without reference to ourselves doesn't really make the research itself more objective. Secondly, and especially important for presentations, the passive form tends to be more difficult for listeners to process mentally. For example, which is easiest to understand?

**Passive:** "The participants were asked to respond to questions that were delivered through online interviews"

Active: "We interviewed participants online and asked them to respond to questions."

There is also a time issue here. The active tends to take less words, less time.

### Limit use of impersonal pronouns (such as "it").

When you were learning to write in English you may have been advised to avoid repeating nouns, and instead to use pronouns like "it." That's good advice, but for research communication—and especially for presentations, where the audience is listening to complex content—it's best to repeat the noun a little more often because it's easier for the audience to follow: they don't have to search back through their memory and do grammar puzzles to connect the pronoun to the noun you mentioned before.

#### Avoid using various words for the same thing.

This is similar to the pronoun issue. You are encouraged in school to vary your vocabulary. But an audience listening to a presentation, perhaps in a second language, doesn't want to mentally process different words with the same meaning. In particular, keep your keywords the same. Don't call something "x", then refer to it as "y", later as "z" for the sake of interesting variation. That's just asking for trouble.

#### Avoid long sentences.

Sometimes you need to connect ideas, and no audience wants to hear just one short, simple sentence after another. But as much as possible avoid complicated sentences. They require more work to understand. Again, this is a more serious issue with presentations than writing because of the difficulty of listening in real time.

#### Keep a simple sentence time-flow.

There are exceptions, but in general when you are describing processes, move from past towards the present. For example, don't say "We subjected the surface to laser treatment after clearing away impurities with solvent chemicals". Say, "We cleared the surface of impurities using solvent chemicals, <u>then</u> began laser treatment." Again, it's just easier to understand.

#### Don't hide a list inside a sentence

This is best explained through an example. Look at this sentence:

"According to this model, support for the nurse from colleagues, seniors and bosses, opportunities for communication with doctors, the nurse's autonomy, and adequate time to make decisions affect the quality of care."

Here we get quite a long list before we get to the point of the list. That's just more difficult to process. So, try this:

"According to this model, the quality of care is affected by various factors: support for the nurse from colleagues, seniors and bosses; opportunities for communication with doctors; the nurse's autonomy; and adequate time to make decisions.

Same content, almost the same words, but much easier to understand, right?

# **Scientific Language Has Become Less Formal**

#### Based on an article in Nature v.539, p.140 (10 November 2016)

Much scholarly and scientific writing is simply not designed for human ears. Academic writing is typically a code, with freedom of expression and emotional range reduced in favor of explicit meaning and reduction in ambiguity. But, do the academics of the Internet age still communicate as formally as their colleagues did in the 1960s?

Analysis published online in the journal *English for Specific Purposes* looked at the language of academic papers selected at random from several high-impact journals published across a range of disciplines in 1965, 1985 and 2015 (K. Hyland and F. Jiang Engl. Specif. Purp. http://doi.org/bssn; 2017). It showed that academic publishing in applied linguistics and sociology has become slightly more formal [perhaps because those fields are anxious to seem "scientifically objective"]. But, in contrast, the number of informal features included in papers in the major electrical-engineering journals went up by 9% over the 40 years. In biology journals, informal language increased by 24%, dominated by a 200% increase in words such as 'l' and 'we.'

Formerly, personal pronouns were discouraged in academic writing, with many guidelines to help inexperienced writers avoid them, especially the passive voice (so we would not write "we saw something" but rather "it was seen"). The passive voice had been encouraged in scholarly writing because it introduces distance between the research data and the researcher, and between the writer and reader. This suggests detached objectivity in observations and conclusions. It just feels more scientific.

However, in biology and some engineering this is changing. One explanation for the rise in informality is that as the passive voice becomes less fashionable, one obvious way to restructure sentences is to use a personal pronoun.

So why change to less formality? Probably because active voice is more direct and easier to read, and because it has more impact. This has useful implications for presentations, which have generally been less formal than written research articles anyway. Clear efficient communication is especially important in spoken expression (with limited time), and it's slightly ridiculous to use impersonal formal language to pretend that "I do not exist," when I am standing in front of the audience.

\* Check with conference organizers (or through previous conference abstracts) to see if a certain style/tone is preferred.

Basic Transition Phrases 基本フレーズ	
Starting your presentation 冒頭の挨拶	<ul> <li>Good morning/afternoon.</li> <li>To begin, I'd like to</li> <li>Let me start with some brief background.</li> </ul>
Why you are giving the presentation 目的	<ul> <li>My main point is</li> <li>My purpose/aim/objective is to</li> <li>This is important because</li> </ul>
Outline 全体の流れ	<ul> <li>There are parts in my presentation</li> <li>I'll proceed through parts</li> <li>firstly/secondly/next/finally, I'll discuss/look at</li> <li>The main points/issues I will touch on are</li> </ul>
Introducing the first point 第一項目に入る	<ul> <li>Let's/Let me start/begin with</li> <li>So, first I'd like to</li> </ul>
Showing graphics, slides etc. 画像など、視覚情報を提示	<ul> <li>I'd like to illustrate this by showing you</li> <li>Look at this.</li> <li>As you can see in this image</li> </ul>
Ending a point/section 小まとめ	<ul><li>So, that's</li><li>So much for</li></ul>
Moving to the next point 第二項目へ	<ul> <li>Now let me/let's move on to</li> <li>Now I'd like to look at</li> </ul>
Logical connectors 理由づけ(~を調べるために…をした)	<ul> <li>Let me explain why/how we did this.</li> <li>So / Therefore /Consequently</li> <li>This is why</li> <li>For that reason</li> </ul>
▶ Giving more details 詳細を加える	<ul> <li>I'd like to expand on this aspect/problem/point.</li> <li>Let me elaborate on that.</li> <li>Let's look at this in a little more detail.</li> </ul>
▶ Referring to a later topic のちに述べる内容についてふれておく	•I'll <u>come back</u> (return) to this point later
▶ Referring back to an earlier point すでに述べたことに再び言及	<ul> <li>Let me go back to what I said earlier about</li> <li>You may recall I said earlier</li> </ul>
▶ Summarizing, repeating main point 主張をまとめ、要点を強調	<ul> <li>So let me recap the main points of my presentation:</li> <li>I'd now like to sum up the main points which were:</li> <li>first I covered, then I talked about, finally, I</li> <li>The main point I've tried to make is</li> </ul>
► Conclusion 結論	<ul> <li>Let me conclude by saying that / quoting</li> <li>Let me stress how important this is.</li> <li>In conclusion, let me leave you with this thought:</li> </ul>

# The Language of Logical Flow

#### Logical transitions: Showing WHY you did something.

So... (例: "We wanted to learn why bananas raise intelligence, <u>so</u> we scanned the brain...") Therefore... For this reason... Because of this... As a result... Hence... Accordingly... Consequently... Thus... With that in mind... So here is <u>how</u> we... [tested our hypothesis]]

注意: Avoid using "then" as a logical connector in academic contexts. It is usually used as a time connector: "X happened, then (after that) Y happened." Using it for a logical connection can be confusing. "So…" is better. At school, Japanese may be taught to avoid using "so," but it is actually suitable and commonly used even in academic speaking.

#### **Logical intention**

The reason we did this is... / The reason this happened is... Let me explain why... In order to... we... [例: "<u>In order to</u> ensure consistency, <u>we</u> kept the room temperature stable."] To... we [Here "To" is short for "In order to" (see above)] As a way to/of... we... [例: As a way of reducing bias, we...]

#### Logical question connection (before event)

How could we [test/confirm/solve] this?

#### Logical question connection (after event)

Why <u>did</u> we do this? Because... Why <u>did</u> this happen? Because... How <u>did</u> we do this? What does this mean?

#### Cause and Effect Relations between events 因果関係

This is because / due to... This is a result of... This happened because... This causes / produces / leads to...

# Phrases for General Presentation Flow 便利なフレーズ

# 1: Introductions 導入、序論

#### Introducing yourself, institution/department

自己紹介、所属する大学・学部の紹介

- Hi. Thanks for coming ...
- I am a student/researcher at ...
- I am part of a team of 20 researchers and our funding comes from...
- Our research is being carried out with the collaboration of the University of ...

#### Giving your present stage in the research cycle

研究の現段階を説明

- What I'm going to present is actually still only in its early stages, but...
- We are already at a quite advanced stage of the research.
- Our research, which we have just finished, is actually part of a wider project involving ...

#### Giving a general aim

#### 目標全般を説明

In this presentation I am going to/I would like to/I will

- discuss some findings
- examine/analyze/bring to your attention...
- argue that...
- give an analysis of/explore the meaning of
- prove/demonstrate to you that ...

#### **Outlining your flow (traditional)**

流れをざっと説明(オーソドックスな形式)

- I will begin by giving you an overview of / background on...
- Then I will move on to...
- After that I will deal with ... And I will conclude with

#### **Outlining your flow (less formal)**

流れをざっと説明(ややカジュアルなスタイル)

- First, I'll be looking at X.
- Then we'll be looking at Y. Then, we'll focus on Y.
- And finally I'm going to take you through Z.
- So, let's begin by looking at X.

#### Explaining your focus (informal)

着眼点を説明(カジュアルなスタイル)

- The main focus will be on ...
- I've chosen to focus on X because...

- What I think, well what I hope, you will find interesting is ...
- I'm NOT going to cover P and Q; I'm just going to ...

#### Showing Importance (Importance) and Enthusiasm

研究の価値・重要性・思い入れを強調

- This is an area that has been really neglected
- This is important because
- I think this has implications for ...
- This could make a useful contribution to...
- What we've found is really interesting.
- I think we have found a radically new solution for...
- I think we have found a truly innovative approach to...
- I think we have found a novel way to...
- We are excited about our results because...

#### Referring to extra supporting material (including handouts)

補足資料(配布するレジュメを含む)に言及

- I've prepared a handout on this, which I will give you at the end.
- Details can also be found on our website. The URL is on the handout.
- You can access details through the QR code on the handout/screen.

# 2: Transitions つなぎの言葉

#### Moving on to the main body of the presentation

はじめの挨拶から本論へ

- Okay, so let me start by looking at ...
- So first I'd like to give you a bit of background. So why did we undertake this research? Well, ...
- So what were our main objectives? Well, ...

#### **Direct transition**

トピックを変えるとき

- Let me now move onto the question of ...
- This brings me to my next point ...
- Next I would like to examine ...
- Now I'd like to show you B. / Now I'd like to talk about B.
- Okay, let's move on to B.

#### Introducing a new element or topic

新たなトピック/ 要点を紹介

- With regard to X ...
- As far as X is concerned ...
- Regarding X ...

#### Showing where you are in the flow

プレゼンの流れを再確認

- Okay, so this is where we are.
- So, this is what we've looked at so far.

#### Referring to a previous topic to introduce the next stage

次の項目に移る前に項目をおさらい

- Before moving on to Z, I'd just like to reiterate what I said about Y.
- Okay, so that's all I wanted to say about X and Y. Now let's look at Z.
- Having considered X, let's go on and look at Y.
- We've focused on X; equally important is Y.

#### Getting the audience interested in the next stage

次の項目に移る際に、聴衆を引きつけるための前置き

- Did you know that you can do X with Y? You didn't, well in the next section of this presentation I'll be telling you how.

# 3. Emphasizing, observing, exemplifying 強調、着眼、事例紹介

#### **Emphasizing a point**

#### 要点を強調

- I must emphasize that ...
- What I want to highlight is ...
- At this point I would like to stress that ...
- What I would like you to notice here is ...
- What I would really like you to focus on here is ...
- These are the main points to remember:
- The main argument in favor of/against this is ...
- This is a particularly important point.
- This is worth remembering because ...

#### **Expressing surprise (helps to gain interest)**

意外な事実だと強調(相手の注意を引き出す)

- To our surprise, we found that ...
- We were surprised to find that ...
- An unexpected result was ...
- Interestingly, we discovered that ...

#### **General Observations**

- 「一般的には00と言われていますが…」
- Broadly speaking, we can say that ...
- In most cases/In general this is true.
- In very general terms ...
- With certain exceptions, this can be seen as ...
- For the most part, people are inclined to think that ...

#### **Cause and Effect**

#### 因果関係

- This is because / due to...
- This is a result of ...

- This causes / produces / leads to...

#### **Giving examples**

#### 事例を挙げる

- Let me give you an example.
- You'll see that this is very similar to ...
- I've got an example of this here.
- I've brought an example of this with me.
- .... for example/for instance...
- There are several examples of this, such as ...

# 4. Referring to past or future parts おさらいと先取り

#### **Referring forward**

のちに述べる内容について先にふれておく

- I'll explain this in a moment.
- I'll talk about that later.
- As I will show you later ...

#### **Referring backward**

#### すでに述べたことに再び言及

- As I said before ...
- Remember I said that ...
- The concept I mentioned earlier ...
- As I mentioned a moment ago ...
- To return to my earlier point ...
- If we go back to this slide ... (showing an earlier slide)

# 5. Discussing results, conclusions 結果・結論の考察

#### Very strong affirmations

#### 立証済みの結果、結論

- These results definitely prove that ...
- We are convinced that our results show that ...
- What these results prove is ...

#### **Tentative affirmations**

推測される結論

- Our results would seem to show that ...
- What these findings seem to highlight is ...
- I think that these results may indicate that ...
- It seems probable from these results that ...
- I think it is reasonable to assume that ...
- What these results probably mean is ...
- We are assuming that the reason for this discrepancy is ...
- We are presuming that this non-agreement is due to ...

- This may indicate that ...
- A possible explanation is ...
- I believe this is due to ...

#### Don't know

#### 未だ結論に至っていない

- To be honest, we are not exactly sure what these results mean.
- I am not really sure why the results appear to be so contradictory, and I'd be interested to hear what you think.

#### Communicating value and benefits

- (行った研究の)価値や優れた点を伝える
- So, the key benefit is...
- One of the main advantages is...
- We are sure that this will lead to ...
- The great thing about this is ...

# 6. Ending 締め<<り

#### Warning audience that presentation is near the end

終わりに差し掛かったら

Okay, we're very close to the end now, but there are just a couple of important things that I still want to tell you.

#### **Final summary**

#### 要点をおさらい

- Well that brings me to the end of the presentation. So, just to recap ...
- So let me just go over the main points.

#### Pointing to the future

#### 今後の目標、可能性を示唆

- So, we've still got quite a long way to go. We...
- What we need to do now is ...
- Given these results, it seems to us that the best thing to do now is ...
- A promising area for future research would probably be ...
- What we are planning to do next is ...

#### **Further information**

#### 補足情報

- I am afraid that I don't have time to go into this in detail. But you can find more information about it on this website (which is on the back page of your handout).
- If you would like more information on this, then please feel free to email me. My address is on the back page of the handout. /My address is in the conference book.

#### Thanking the audience

「ご清聴ありがとうございました」

- Thanks very much for coming.
- Thank you for your attention.
  - \* Adapted from: A. Wallwork, English for Presentations at International Conferences (2010)

# **Giving Nuance** 言い方ひとつでニュアンス変わる

Often we avoid saying things in research presentations because we are not 100% sure. In fact, statements about research are often full of uncertainty, but it is often those speculative statements that are most important and most interesting, and which will help you get useful feedback. So it's <u>sometimes</u> good to say these things... we just need to say them carefully.

#### **Make it clear it's only your opinion** 「個人(私)の意見にすぎませんが…」

In my opinion... I think/feel/believe... As I see it... The way I see it... It seems to me... Personally, I think... I would say that...

# **Explain it's too early to be certain, but...**「結論を出すには早すぎますが、推論の域で申しますと...」

It's too early to draw solid conclusions, but... Based on previous research, we can speculate that... From what we know, I would predict that... Early signs suggest that... While we can't be certain at this stage,... While it's only speculation at this stage,... If I were asked to guess, I'd say ...

# **Express degrees of certainty** 「おそらく〇〇だと思われますが…」

... is almost certainly...
... is (very) probably...
It is (un)likely that...
I am (very/quite/reasonably/somewhat) confident that...
It might be that...
Perhaps/Maybe...
I'm wondering if...
It is conceivable/possible that...
It is not inconceivable/impossible that...



#### \* Adapted from: A. Wallwork, *English for Presentations at International Conferences* (2010)

# Delivery

# To Be or Not to Be? Just Be Yourself

It's fine to want to do a presentation that amazes and impresses people. And if you enjoy performing, then go ahead and give the kind of performance that suits you and will hopefully get the response you want from the audience. But presenting doesn't need to be so much about performance; it's more about communicating ideas effectively. You don't need to act like someone else to do that, you can be yourself. Because, in a sense, it's not about you, it's about the ideas, and transferring them to others, then bouncing those ideas around together to see if any new shapes, better ideas, emerge—that's why we have "question time."

Let's analyze this. Why do we think of presentations as performance? Well, at a theoretical (sociolinguistic) level, some people argue that all speech is performance, whether you're playing Hamlet in a theatre full of Shakespeare fans or asking a family member to pass the pepper shaker. OK, but to treat these as the same is a little extreme. In reality, some communication is more "performative," some less so. The point is this: we tend to view presentations as more performative than they usually need to be. So, again, why?

This prejudice about presentations comes from our earliest experience. We probably do our first presentations at school, and in that context it's natural to feel we're being judged by our performance: it may even be in a class dedicated to speech performance in a first or second language, so the emphasis may be more on the way we deliver than on the content. We may be graded, we may even receive— or not receive—a prize based on that performance in competition with others.

Surprisingly, this emphasis on performance doesn't end when we enter university. I run presentations courses for both graduate and undergraduate students, and there something interesting happens. As students move higher they tend to become less like themselves when they present, more like some kind of model of a serious researcher. They avoid using personal terms like "you" or "I" or "we" and overcomplicate their language. They speak more quickly. They flatten their voice, reduce facial expression and body movement. It takes a while to work out what is happening, and when you do it can make you laugh. They are performing the role of an objective researcher, perhaps learned from their seniors. They think it's best to be full of data and empty of feeling because that is objectivity. But they go too far, and they're actually really acting the part of a boring robotic Hamlet. It's funny because it's weird—a human standing in front of you behaving as if they are a machine.

Acting like a robot doesn't make your ideas and supporting data more objective. Presenting ideas like a human doesn't mean your content is less objective. Trying to fool people by performing the role of a detached researcher is not just comical, it's kind of an insult to the audience's intelligence. And anyway, few really good researchers are at heart detached: they are emotionally engaged, adventurous and ambitious in the best human spirit. This doesn't mean you should "act" engaged, adventurous and ambitious, but you don't need to completely hide it.

It's sometimes those who are least well prepared who do the robot act. This is in part due to nervousness and the ease and comfort of falling into robotic delivery, but it's also a kind of unconscious overcompensation for the poor preparation: "I haven't prepared well, so I need to act like I'm serious about my work." So let's try this. Instead of preparing poorly and acting like a professional, prepare professionally and enjoy presenting as yourself.

# Ooh... what should I wear?!

Here I won't discuss presentations within your research group. You should just do what suits yourself while not offending anyone.

Even for a conference, on the whole you should wear what suits you without causing offense... unless you want to cause offense for some reason. If everyone wore exactly the same clothes, conference would be awfully boring... apart from which, it might be difficult to find someone you're looking for. On the other hand, it's worth giving some thought to the issue of your dress. Just don't overthink it.

#### **Formal Versus Informal**

Let's set some boundaries. Don't dress like you're receiving the Nobel Prize at the Award Ceremony in Oslo. But don't wear your pajamas. Somewhere in between there would be best.

Keep in mind that in general research communication has become somewhat less formal in recent years in many (but be careful, not all) contexts. As discussed in the chapter on language ("Words"), the language of articles, and especially presentations, has become less formal, less impersonal than it used to be.

It's worth thinking for two minutes about the mindset of the formal and informal in dress. Formal dress has traditionally been a way for groups to communicate the importance of an event and the respect held for the event by those attending. But we see less formal wear at conferences these days. The main reason is that conferences are viewed more pragmatically than they used to be, as an opportunity to exchange ideas and connect researchars. In this context, dressing up may be seen as somewhat unnecessary, even a waste of time. The focus is more on the research content than on the image, appearance of the speaker. So, you don't want to seem disrespectful or lazy, but you may not want to appear like someone who's thinking too much about "keeping up appearances" instead of focusing on their work.

#### **Research the style**

This is just common sense, but it's common sense I wish I'd thought about a long time ago. I attended a conference in Hawaii a few years back. I had never attended a meeting of this academic organization before, but it was related to the study of Japanese culture so I kind of assumed it might be a little more formal than usual. I rolled into the opening night "get-together" dinner in a suit coat and tie. I was the only person in that room with either a coat or tie. In fact, I was one of the few not wearing a Hawaiian shirt. I immediately returned to my room to get rid of the suit and tie, though I was not about to go searching for a Hawaiian shirt... they're not for everyone! My point is, I could have saved myself the bother if I'd done an image search online beforehand for that organization's conferences. I would have got some clues.

### **Don't Outshine Your Research**

Be yourself. If you're a formal person, then go in that direction without going too far and creating social distance from yourself. If you're a flamboyant person, you don't necessarily need to hide it. Either way, the important thing is not to draw so much attention to yourself that your research content is overshadowed. Keep people's attention on what you're doing and let your self relax.

# **Simple Delivery Tips**

# Don't survive it, enjoy it.

### Communicate

American University (UCLA) research into communications showed an audience is influenced by a speaker in the following percentages:



### **Body Language**

- \* It's not good to read your speech in many contexts. Use notes if possible.
- \* Keep eye contact with your audience.
- \* Don't be afraid to gesture... naturally.
- \* Stand in a relaxed (not TOO relaxed) way and move freely.
- \* Be yourself.

### Voice

- Speak at a good volume.
- Speak with energy and sincerity.
- Pronounce words clearly.
- Try to use natural, friendly tones.
- Vary your voice, or you will sound boring.
- Speak at a comfortable speed for you and the audience.
- Pause (stop) sometimes, especially between topics/sections.

# If you prepare, you can relax...

- $\diamond$  Practice your speech over and over, so you can be confident.
- $\diamond$  Prepare clear notes to help you.
- $\diamond$  Time your speech and make sure you have plenty of time to finish.

# **10 Common Delivery Faults**

- Reading text
- Looking at screen
- Eye movement fast, erratic
- Speaking too fast
- Low volume
- Flat voice
- Unclear enunciation
- Body too static, tense
- Lack of natural facial expression change
- Poor posture
- Standing in front of screen

# **Silence is your Friend**

Speakers tend to worry too much about pausing. If you forget what you're going to say, don't panic. Just return to your notes... even your script if necessary. A little silence is not a bad thing. In fact, pausing has positive functions. You can pause to...

- mark a transition, maintaining logical clarity.
- help the audience absorb difficult material.
- promote deeper consideration of your idea.
- give emphasis to a point.
- For aesthetic effect: silence is a pleasant break.



# **Speak Clearly**

# **Enunciate clearly.**

This means forming the sounds in your mouth in a way that is understandable to the great majority of the audience. You don't need to speak like a BBC or PBS announcer. In fact, being typically British and American respectively, BBC and PBS announcers speak differently to each other. But their accents tend toward a kind of neutrality, away from radically unusual sounds.

# **Give yourself time**

Most importantly, professional deliverers of serious information speak not slowly exactly, but at a pace that allows them to form sounds accurately and for the audience to distinguish sounds from each other. This is why listening to quite high level English on the BBC can be easier than listening to two English people talking about the weather. So, you have to give yourself time to speak at a comfortable pace for you and the audience.

## **Check pronunciation**

During preparation, take time to check pronunciation of words through an electronic dictionary or online. To find a pronunciation recording of a word online, in your web browser just key in the word and "pronunciation." Be a little careful with online pronunciation recordings at unofficial sites—they're not always accurately reflecting common pronunciation.



Andis Rado, CC BY-SA4.0 Wikimedia

# **Try Not to Read your Presentation**

In the Introductory chapter a case was made for writing a script as you prepare your presentation. But generally speaking you shouldn't actually read the script when you present. There are some scholarly fields such as certain areas of philosophy where the nuance of every single word can be so important that reading is common, but for most presentations it's not recommended. Why? Well, think about your own experience watching presentations. Which presentations put you to sleep quickest?

There's no question, being read to makes people sleepy. That's why parents do it for their kids at bedtime. In the context of presentations, when someone is reading it's firstly like they're not really talking to us. Some of the indicators of a person talking to us directly tend to go missing when we read: the eye contact, the natural facial expression changes, the natural variations of the voice as we express ourselves. If the person doesn't give us those clues that they're talking to us personally, we're usually less interested: it's a natural unconscious response.

Moreover, the effect can last beyond the presentation. Which speaker are you more likely to interact with after a presentation: someone who spoke to you directly, or someone who read something to you? Obviously, it's the former, so if you're interested in having meaningful and perhaps very useful interactions with people after you present, keep in mind the power of speaking naturally and directly to the audience.

Still, the fact is people read their presentations. One reason is that when we're nervous we probably don't think so much about whether people are listening—we might actually be slightly relieved if they're not paying attention. But the main reason is fear of mistakes, right? This is especially strong when we're speaking in a second or third language.

Keep it as natural as possible. In everyday conversation, even in your first language, you make mistakes. Native speakers make mistakes when they present sometimes. But most people don't notice, because most people are not language teachers. We're interested in the content not the words. The point is, of course strive for accuracy, get your material checked, but it's better to speak directly to the audience as much as you can and make small mistakes than to read it all perfectly.

That doesn't mean you should memorize every word from your script. It means practicing speaking naturally, perhaps with your slides to prompt you, and the script as a reference when you're unsure, until you can speak directly to the audience and with a high level of accuracy. Because you will then be able to talk to the audience, it will make a big difference to your interaction with them and it will really help develop your confidence.

#### 2 things:

- 1. Don't make language mistakes on slides. People see these and remember them.
- 2. Don't read your slides. That's still reading and it's still boring. What's more, slides full of text are visually boring. It's a double dose of boring.

# How to Be More Relaxed when Presenting

#### 1. Consider why you are presenting.

There are various reasons to present about your research. You may want to impress people so that they will help you or your research in some way in the future. But very often we are presenting in order to get useful feedback about the content from the audience in order to advance our research. Sure, compliments are nice—"Great presentation!"—but what you really want is the feedback, because this can help make your research stronger or develop it further. In fact, negative feedback can be more helpful in a practical sense than the positive because it makes you think more deeply and carefully. So don't worry about getting negative comments. They might hurt your pride a little, but they won't destroy you. Above all, a presentation is not an exam.

#### 2. Reconsider your relationship with the audience.

Perhaps you worry that someone will attack you with their words. It's possible, but even if that happens you will only be embarrassed. No one ever really died of embarrassment. More importantly, the truth is the audience is not really very interested in you. They are usually much more interested in your ideas than in you personally. (To be honest, a few people in the audience are probably not even interested in your ideas... they're thinking of other things, usually themselves, maybe what they'll have for dinner.) The key point is, most people want to help you—even if it's through constructive criticism of your work—not judge you.

#### 3. You don't need to "perform" for the audience.

Although you are standing in front of the audience like a celebrity, you are not a performer. It's good to keep the audience attentive by presenting well so you can get good feedback, but you're not a professional entertainer. Be yourself as much as possible and talk as if you are talking to people who you respect but who are no better or worse than you... because they're not.

#### 4. Don't focus on language.

Presenting in a second or third language is a much bigger and more frightening task. In that case, do your best to prepare early, get your language checked by a native speaker, rehearse. This will allow you to worry less about language as you present. Of course, work on achieving clear and correct language, but if you make minor language mistakes as you speak it's not a big problem so long as people understand you. (Mistakes are more serious on slides, because people are more likely to notice and remember them.) Generally-speaking, the people in your audience are not language teachers. The audience is principally interested in the content; they barely even notice minor spoken language mistakes.

#### 5. Use the nervousness to energize communication.

Your shaking hands, your rapid heartbeat... that's energy. You could probably recharge your smartphone with the nervous energy you develop in a 10 minute speech. You can use that energy to move your body, change expression and vary your voice. That is, you can redirect your nervous energy towards dynamic (energetic) communication. Of course, you don't want to overdo it, but generally speaking, a certain amount of movement is good.

#### 6. Simplify.

Having too much detail in your presentation is likely to cause time problems, and complicated sentences are just going to make speaking more difficult. So as much as possible, simplify the content, the language, everything. Give the audience what they need to understand as efficiently as possible. Make it clear to the audience you can provide other supporting detail in the Q&A if they like, or somewhere else outside your presentation. This will allow you, and them, to relax.

#### 7. Breathe Well.

Don't forget to breathe... deeply... not just before but during your presentation. It's often good to pause while presenting, and when you do, take in some air and let it out slowly. Consider meditation (瞑想) before presenting... even 3 minutes can make a big difference.

#### 8. Choose to enjoy it.

New and challenging experiences can cause stress but stress is not always bad. We are often more "alive" at those times. Remember that nothing very terrible can happen. No one ever died from a bad presentation and we may learn more from our own bad presentations than the good ones. So, as much as possible, enjoy telling people about your research. And don't be afraid to laugh, especially at (and with) yourself.



# A Presentation is NOT usually an exam.

# **Practical Ways to Begin with Impact**

It is said that audience members decide within the first 1 minute whether to pay attention to your presentation. Remember, audiences may be attending not just one but many presentations, perhaps all day for several days. In that situation, most of us give only a fraction of our attention to any presentation. But as speakers we want the audience to give us their complete attention in order to give us useful feedback. So how do we secure their interest <u>without acting like a TV variety show host</u>? Let's look at what we can do in terms of the content of our presentation.

#### 1. Start without the screen

This quite dramatically changes the atmosphere of the room and the nature of communication. It removes the divided focus created when you and the screen compete for attention in the audience's minds. Actually, simply the unusualness of this situation is very likely to gain their attention.

On top of that, the focus on you rather than the projection technology humanizes your interaction. This can have impact beyond your presentation, making you seem more approachable for further interaction after you present. (This technique can be used anytime during your presentation (so long as you don't switch the screen on and off too often.)

In PowerPoint, if you need the white light of the projector in the darkened room, press the "w" key while in the "presenter view." If you don't need that light, switch it off by pressing the "b" key. Now the screen goes blank. You can switch the screen back on by pressing "w" or "b" again.

#### 2. Launch suddenly

Beginning with "Hello. My name is X. I am from Y. Today, I'd like to talk to you about Z" is not wrong, but it's not necessarily useful, especially since many people may already know those things: they may be in the program/schedule or on your title slide. Moreover, it sends a message to the audience that this is just another presentation like all the others they've seen. For immediate impact, you can skip that greeting and begin straight away. For example, in some circumstances, it may even be suitable to start by saying your main idea. That has impact.

#### 3. Get quickly to the main idea and importance

A problem with presentations for many audience members is that the speaker has no clear main idea or the theme is too narrow for them. They may not be interested immediately because it seems to be unimportant to them or to the world. This is especially true of research presentations. So do your best to make the main idea clear early, even if it's just in general terms. And, as far as possible, show how it affects <u>them</u>.

例 When we talk about paper clips, we are talking about the value of simplicity in invention and in our lives.

### 4. Challenge expectations

Say something that doesn't fit with most people's beliefs or expectations. This forces the audience to engage actively, intellectually with your content. While it's good to challenge the audience like this, be careful that you don't simply offend them. Avoid being too aggressive in your statement.

 ${\it M}$  Some people say that in the digital age, the paper clip will die along with paper. This is wrong.
### 5. Reveal Striking Data

Numbers are a very direct and simple way to get attention if they are in some way surprising.

例 Every year humans buy 20,000,000,000 paper clips.

### 6. Ask a Question

Questions encourage the audience to participate actively. The easiest form to manage is a simple survey question, because it may require simple yes/no responses through raised hands. This allows you to keep control, making sure the audience response doesn't take up valuable time and distract from your own content. Also, even that raising of hands by the audience helps to raise the tension a little. But your question may not even need a response. In that case make it clear to the audience.

例 Raise your hand if you have paper clips at your office desk.

Raise your hand if you've never used a paper clip.... Of course, no one...

#### 7. Use Humor

Humor is obviously a good way to get audience attention, as well as to help them—and yourself—relax. But don't depend too heavily on the success of any humor you use.

例 I love paperclips. I once used a paperclip to hold my pants together when a pants button suddenly came off at an academic conference.

#### 8. Stimulate Imagination

You can simple ask the audience to imagine a situation which you describe, or you can ask them to imagine something freely. Both of these engage the audience intellectually and perhaps emotionally, but they may take some time, so be careful.

例 Imagine you have papers on your desk and you need to separate these into manageable piles.

Imagine something you can use a paper clip for (apart from holding paper sheets together).

### 9. Use a Quote

A quote can concentrate the audience's intellectual energy on the content of your presentation. Quotes are generally short but contain deep or significant meaning. They may also be from a person who audience members recognize and can relate to.

例 Thomas Edison said this in 1927: "The paper clip is a model of great invention: simple, durable, adaptable, endlessly useful."

### 10. Use a Short, Theme-related Story

Tell an interesting background story related to the topic of your presentation. This will help to engage the audience with your content. If the story is about you, the audience may also connect with you personally. But keep it short.

例 During World War II the Nazis in Norway banned Norwegians from displaying their national culture. What did Norwegians do? They began wearing simple paper clips as a symbol of resistance because it was believed that paper clips were invented in Norway. Actually, they weren't, but...

### **Humor in Presentations**

"Start your speech with a joke," some people say. But it's not necessary to use humor in presenting. In some cases, with particularly sensitive subjects, it may actually be best if you avoid humor. Humor doesn't suit everyone and it doesn't suit every situation. So, above all, you shouldn't feel pressure to be humorous when you're presenting. Nevertheless, it's true that humor is often valued by audiences and by speakers. Why? There are several reasons

#### Why can a little humor help?

- 1. It's enjoyable. Whenever we can take enjoyment from a task, it's transformed. It takes on a more positive emotional aspect. This motivates people to participate actively, to listen well.
- 2. It's relaxing. Because the situation is now not only about work and achieving certain goals but contains a degree of pleasure, nervousness is reduced. This benefits the speaker above all, since the speaker is likely to be the most nervous.
- 3. It supports a friendly atmosphere. When we share humor, especially when we share laughter, the common enjoyment brings us closer despite cultural, personal, professional differences between us. This is sometimes referred to as "immediacy."\* Creating this close atmosphere is especially important when we are sharing ideas which may produce disagreement. The atmosphere created in part by humor and laughter can help us negotiate disagreement more comfortably.
- 4. It makes the speaker seem more approachable. This will encourage the audience to interact with the speaker not just in question time but after the presentation.
- 5. It may improve intellectual functioning. Research has emerged suggesting that humor and laughter may help us, as audience members and as speakers, to operate at a higher intellectual level. It seems we tend to think more flexibly and effectively in a humorous atmosphere. We are more alert in a sense. Now there is even some biological and neuroscience support for this.\*

#### What kinds of humor work best in presentations?

- 1. Avoid retelling standard jokes you heard or read somewhere. While in the past it was often said that you should begin a speech or presentation with a joke, these days that doesn't always work so well. It seems too much like a performance.
- 2. Try to make the humor personal. Virtually anything that makes us feel awkward, embarrassed, even stressed can become humorous if we choose to see it and describe it that way. For example: "On the way to the conference hall this morning, I fell asleep on the train and woke up on the other side of town"; "You don't know how happy I am to be here. I've never been in this country before and I'm not used to cars coming from the right hand side. Honestly, I nearly killed myself crossing the street this morning"; "If I look a little tense, I should tell you it's not nervousness. I'm trying to get over jet lag and just drank three cups of coffee."

- 3. Deliver the humor as part of your natural speech. If you deliver the humor like a comedy performance, the audience will expect you to make them laugh. If it doesn't work, if they don't laugh, you've just failed and it's obvious that you've failed because of that terrible silence in the room. But if you make any of the humorous observations in the paragraph above and no one laughs, it's not a big problem. You haven't presented yourself as a comedian; you've just described something in your daily life. It's easy to move right along to your presentation content.
- 4. Don't invest too much time on the humor. Firstly, we usually don't have much time and we don't want to distract the audience from our content. Secondly, the more time you spend on the humor, the more pressure you have to make people laugh. If your humor takes just 10 seconds, no one cares much or even notices if it fails.
- 5. Say it because it's funny for YOU and you want to share it. Ideally, it should be something that you would laugh at yourself even if you were alone. This makes it more natural, and it also reduces the pressure on yourself to make others laugh. So consider how others may react, but don't depend upon them laughing.
- 6. It's safest to void insulting other people. "Self-deprecating humor" (humor based on our own mistakes or failures [自己軽視]) sometimes works best, for three reasons: 1. it is safer to insult yourself than to insult others; 2. it makes you seem more "human," which may make people more ready to interact with you; 3. you shouldn't do it too much, but willingness to show your own failures can actually be a sign of personal confidence.

#### \* References:

Berk, Lee. Humor similar to meditation enhances EEG power spectral density of gamma wave band activity (31-40Hz) and synchrony, *Federation of American Societies for Experimental Biology (FASEB) Journal* 28:1 (2014).

Martin, Rod. The Psychology of Humor: An Integrative Approach, London: Elsevier, 2007



## **The Future of Handouts**

As you've surely noticed, we are moving increasingly towards a "paperless society" for environmental and convenience reasons. That raises the issue of the future of those handouts that have been a part of research presentations in most fields for a long time. I'm not a fortune teller, but it would be helpful to consider this for your own future presentations.

Firstly, though, why have handouts existed for so long? We can identify 3 main reasons:

1. Handouts can help you to keep clarity in a presentation by allowing you to remove excessive detail. Of course, key supporting material needs to be in the presentation, but you surely have a lot of data, probably more than you need. So the handouts are a very useful way to show that you have plenty of supporting material without cluttering your presentation.

2. Handouts give the audience a "take away," allowing them to review your material later. It can also keep your presentation in their mind longer and promote future contact.

3. Handouts may help people better understand your presentation by allowing the audience to absorb the material at their own speed by reading, looking at diagrams, as you speak. This is especially useful when the audience has less field-specific knowledge and/or language proficiency.

#### The downside of handouts

If you give handouts to the audience before a presentation, keep in mind that they may distract the audience from you and your slides. Consequently, even if you give the handouts to improve communication, it may actually have the opposite effect.

So, if your aim in giving handouts is mostly for the audience's <u>future</u> reference, then give them out <u>after</u> the presentation. You can still mention that you'll be doing that before or during the presentation so the audience knows they will have them eventually.

### 注意: Be careful about giving handouts containing research results that have not been published yet. You can guess why.

Avoid giving handouts during a presentation. It's an unnecessary interruption and distraction.

Printed copies of slides may have some benefit to the audience, but if you can make handouts that present the material in a more effective way according to your purpose in having handouts, then do it. For example, if you only want to give supplementary supporting detail or references, then just give those, or if you want the audience to have quotes you are discussing, just print those. In either case, don't use the slide format—it may look a little lazy.

**Consider digital alternatives**, such as offering to send **email or SNS** with that information for later reference. This will help you to make and sustain contact with people.

Or you can make it possible for the audience to access material online, even through a QR code on a slide. This access could happen even during your presentation since many people have constant online access. But be careful of sending the audience online when you're talking... you're sending them to the "devil's playground"!

# Slide Design

## **Basic Slide Design Issues: Quick Guide**

### **General Design**

- > There is no hard rule about the number of slides in a presentation.
- Don't use slides as a "dumping ground" (ゴミ捨場) for extra information. If the information is not necessary, cut it, or send it to supporting handouts/Q&A slides.
- > Animation can be effective. Just use it carefully.
- > Color is a matter of taste. Just make sure it does not distract from your content.
- Color can be used effectively to clarify, for example to distinguish parts of a slide, or sections of the presentation
- > It is OK to use transition effects between sections, but use gentle effects.

#### Text

- Minimize the quantity of text: 1-7-7 is a guideline (maximum 1 idea per slide, 7 lines, 7 words per line).
- Ensure font is big enough
- Avoid fancy text that is difficult to read.
- Be careful with UPPERCASE. It is slightly more difficult to read.
- Avoid clutter.
- Some color variation can help clarity, but don't overdo it.
- Ensure enough contrast between text and background.
- Don't place text on background of various colors.
- Ensure adequate spacing between letters in the text.
- Avoid using more than 2 different fonts on one slide.
- You don't always have to center the text.
- Giving translations on slides may be helpful for certain audiences, but subordinate one language (make clear which language you are using).
- Don't use too much translation or too many different languages.



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### Images, Diagrams

- Use photos as well as diagrams if it helps to show what you're talking about.
- Don't be afraid to use images of humans on your slides. Humans respond to images of humans.
- Use images such as photos for clarity and impact, not for decoration.
- Avoid using more than one or two photographic images per slide.
- Make sure the image is big and simple enough for easy viewing
- Don't squeeze information, imagery onto slides: "negative (blank/empty) space" is good.
- Be careful when cutting, pasting and expanding diagrams/images that you don't lose clarity.
- Slides are great for comparisons, but avoid squeezing graphs side-by-side on one slide if it makes both graphs difficult to see.
- Consider editing out (or fading) unnecessary parts of graphs or diagrams.
- Avoid having your organization logo on every slide. It's a waste of space.
- Full-screen images can have great impact.
- "Fading" an image behind text is possible, but often doesn't work.
- Use an image with a large field of single color if you want to put text over it.
- Use text boxes for clear text-background contrast.
- Use "builds" to reveal information gradually.

### **Interacting with Slides**

- Use slides only to clarify your point or process so that they serve your speech, not compete with it.
- Make sure you give the audience enough time to read everything on slides. Don't expect them to read and listen at the same time.
- Don't read the slides.
- Gesturing to the screen or using a laser pointer is possible, but if you are able to highlight your specific point on the screen using animation, such as zoom or fade or on-screen pointers, then it's usually much better to do that.
- Make careful decisions about the speed at which you introduce information. Sometimes, exposing points or images one by one using animation allows you to better control the audience's focus and absorption of individual points.
- When using graphs, explain the X (horizontal) and Y (vertical) axes.
- If you don't use the slides for some time during the presentation, consider muting them for more direct, focuses and personal communication.

### Referencing

Be especially careful with copyright issues if the presentation slides are going to appear online for some reason.

Make sure you give sources for information, whether text or images, but don't allow your referencing to become distracting clutter. For example, don't include a web address on a slide within the presentation. It is better to provide a list of data/quote references (参考) and a separate list of image sources at the **end** of your presentation.

## **More Slide Design Suggestions**

### **Preparation Considerations**

It's best to build your presentation from a script, or at least notes, then make your slides after. That is, put what you are going to say first, then make the slides after that. This tends to make more logically clear and smoothly flowing presentations.

When preparing slides, be aware that the backlighting on your computer screen is probably better than the front-lighting in the room where you will project the slides. So make sure you have sufficient contrast so the slide content can be seen easily.

### **Slide Ratios**

The default slide shape in newer versions of PowerPoint software use the "Wide-screen" (16:9) format. This is effective, especially where you need to make side-by-side comparisons of ideas or data. If you want to change to a more square shape (4:3 ratio) click on the "Design" tab in the top menu and then click on "Slide Size."



### **Templates**

It's OK to use slide templates offered by the software, but make sure it's suitable. Avoid clutter caused by fancy template design.



### Text

A page of a book and a slide are different things. Don't design a slide like a page or smartphone screen.

Most importantly, reduce the amount of text, use larger images, allow plenty of "negative space" (blank space). This helps the audience understand and creates a clean, clear atmosphere.

Always put the main idea of your presentation on a slide... alone. This is important to make sure the audience is aware of this main point as it is necessary to make sense of your whole presentation. If they miss that, they're likely to be confused.

#### Images

Think about taking your own photos related to your research... this will make your research more concrete and "real"... not just abstract ideas or data. Diagrams are fine and often necessary, but photos are great to show context and real-world importance.

Where possible (and without affecting people's privacy) it's good to include humans in photos. Even serious research audiences respond positively to human images: they are more interested and emotionally connected to your content.

### Color

Don't be afraid to use color... carefully. Researchers are sometimes afraid to use color because it looks like decoration. But, actually, <u>color can serve an important function in terms of clarity</u>. For example, a color background on a transition slide makes it clear this is a transition. Colored text, along with text size, in a heading or subheading makes it clear this is separate. That is, you can create separation and hierarchy with color.

Use your intuition in selecting colors. The audience's attention will be drawn first to bold, solid colors, and usually moves from darker to lighter shades. Red will always draw our attention first, but you need to be careful with that color because it suggests danger or at least raises tension.

Don't use too many colors. Different shades or tints of the same basic color may work best.

Remember, don't try to be too subtle, because color is often diluted (weakened) when frontprojected. You need strong contrast.



### Arranging Content Effectively (Slide Composition)

The word "composition" is used to mean the way elements in a picture, poster, web page, or slide, etc. are arranged. Most of us have an intuitive feeling about what is well composed and what is not. Graphic artists think extremely deeply about it because it's serious business for them.

Unfortunately, researchers generally don't think enough about slide composition. This is not just a matter of creating attractive slides (although it includes that) but is most importantly a matter of effective communication.

There is one serious failing that occurs much more in research presentation slides than in slides for other kinds of presentations: too much content on each slide. Students have told me they have actually been advised by their professor or senior colleagues to make slides look more complex. So why do researchers put too much content on slides?

It seems that some people believe if slides look more complicated it sends a message to the audience that the research has been diligent and detailed. And it is believed that sending this message is more important than making the content clear to the audience. Of course, from a communicative perspective, this is completely wrong, and it is also unlikely that intelligent audiences are really fooled and impressed by complicated, content-heavy slide design. Audiences are more likely to be impressed by careful design that produces clear communication.

### **Towards Clearer Design**

### **1. Appreciate White Space (Negative Space)**

White space is a very familiar concept to graphic designers. It is simply the parts of a page, poster or screen that have nothing in them. It is also known as "negative space" since the space doesn't need to be white. But this negative space is not negative in terms of function. It's important in making effective slides: insufficient white space is a major flaw in research presentation slides.

For designers, white space gives "breathing space" to a design. You can actually feel it when you compare a cluttered slide with a well-designed slide with generous white space. The white space also helps focus attention on the text or image that it surrounds and that has two effects: it can increase impact, and most importantly for researchers, it can improve communicative clarity.

### 2. Move secondary content/data somewhere else

It's good to have lots of data available to support your presentation. But that doesn't mean you need to show all of it during your presentation, and it certainly doesn't mean you have to fill slides with data. So, firstly, move secondary data that you will not actually talk about to extra slides that you can use in the Q&A after the presentation, put them on handouts, or place them online so that the audience can access them, perhaps through a QR code on a slide or handout. Then, **before or during your presentation tell the audience this extra data is available to them.** 

### 3. Spread content across slides

Here (right) you can see what happens when a slide cluttered with data is separated into three slides. There are at least 3 benefits of this.

1. It controls the <u>flow</u> of information. The audience is able to <u>focus</u> on each piece of content in turn. This makes understanding easier and keeps the audience's attention focused on what you are talking about, not moving all over a "busy" slide and various contents that are not directly related to what you are saying at the time. That is, it reduces audience distraction and keeps the speaker in control of the information flow.

2. It improves visibility. By allowing you to make the content larger, the audience can see all of the information easily, without straining. Audiences really appreciate this; poor clarity of text and imagery is the most common audience complaints I see in feedback given on presentations.

3. It allows you to create more white space around your content. This makes the slide more attractive by creating a sense of "breathing space" and gives your whole presentation a "clean," well-organized and efficient feeling.

\* In the 1<sup>st</sup> and 2<sup>nd</sup> reformed slides, you can see the presenter has added animated shapes and color to highlight specific points of focus.



森林・林業関係の教育機関数 (森林・林業専攻を有するもの)				
	平成28年度	平成18年度		
林業大学校	14	6*		
大学	28	26		
高校	72	73		

林業大学校の設立年(改組年)								
₽成	24	25	26	27	28	29	30	今後
所在地	京都島根	]–	宮崎	<del>釜石</del> 秋田 高知	山形 福徳 大分	岩手 兵庫 和歌山	三重 (予定) 高知*	北海道 芦別? 美唄? (構想)
	自治位	*(吃	FILL) 訳	÷⇔				

### **Text on Slides**

### The "Text-heavy" Slide Problem

One of the most common causes of poor presentations is "text heavy" slides. A text heavy slide is one where there is simply too much text.

### Why are text-heavy slides a problem?

1. They force or encourage the audience to spend a lot of time reading instead of listening to the speaker, so the audience is not connecting with the speaker. Slides should focus and clarify information given by the speaker, not create more work.

2. Too much text reduces space for illustrations, photography, diagrams and charts... which are generally more efficient ways of communicating information visually.

3. If there is a lot of text, it needs to be smaller, and this makes it difficult for the audience to read.

4. Text heavy slides tend to annoy audiences because if you're asking them to simply read, then why can't they do that at home?

5. Sometimes text heavy slides don't annoy the audience because the text puts them to sleep first.

### Why do presenters make text heavy slides?

- **1.** Speakers sometimes use the slides as a script for themselves. They read the slides to the audience.
  - **Fix it:** If you need a script, put it in the Notes section of your slide software so you can read it from the laptop computer or tablet, or use paper notes.
- 2. The speaker lacks confidence in their speaking or in the audience's ability to understand them, so they use the screen as a backup text for their speech.
  - **Fix it**: Reduce the slide text to keywords or phrases, so that the audience doesn't need to read every single word you say.
- **3.** The speaker is trying to save time by giving extra information through the text on slides. This is unrealistic and distracting, reducing the effectiveness of a presentation.
  - **Fix it**: Don't use slides to add extra information. You need to make difficult decisions about what to cut from your presentation to fit the time available, not try such tricks. If you have extra supporting information, give it to the audience later in some form.
- 4. The speaker is being lazy. Instead of editing their presentation, including slides, carefully to optimize communication, they just put everything in the slides and expect the audience to edit it for themselves during the presentation. Sometimes presenters try to fool themselves that they are not being lazy, just offering the audience freedom to choose what information they like. No, you need to make decisions in order to keep the audience's attention and focus. There are other, better ways to offer extra information, such as extra slides in Q&A, handouts and online links.

#### Fix it: Don't be lazy!

 Especially in some humanities and social science fields—such as literature, linguistics and philosophy—it's sometimes necessary to quote passages of text in full for close textual analysis.

Fix it: a. Don't quote more than you absolutely need to make your point.

b. Break the text into smaller parts.

c. Use animation to reveal text gradually so the audience is not overwhelmed by text.

d. Use highlighting or text color to focus attention on important words, phrases or sentences.

\* See Figure \* on the next page.

### How much text is too much text? The 1-7-7 rule

The 1-7-7 rule is not really a rule, and sometimes there are reasons for ignoring it. But it's a useful guideline. What does it mean?

- 1 means "1 slide: 1 idea." That is, don't try to squeeze more than one main point onto a slide. There is no good reason to do that. Separating ideas through separate slides helps the audience navigate.
- 7 means "maximum of 7 lines of text on a slide." More than this tends to reduce the audience's motivation and attention.
- **7** means "maximum of 7 words per line." Keep the lines relatively short to reduce distraction. This often means using brief point-form notations instead of full-text to support your speech.



### Figure \*: Fixing a text-heavy slide



In *The Garden of Eden*, does "Africa" exist as a geographic place, or does it function as a psychological symbol? In the manuscript version of the book, David and Catherine's sexual experiments are referred to as "tribal things," whichsuggests what we might call "Africanization" in both physical and psychological terms. On the other hand, while the elephant hunting story David writes has its background in East Africa, it clearly reflects the American literary tradition in its depiction of a little boy's initiation into manhood through the trial of gaining spiritual independence from his father. Since Tom Jenks, the editor of Hemingway's novel, eliminated the phrase "tribal things" and its implications, and included David's completion of the rather conventionally structured short story as a key element in the manuscript.

Matsushita, 2014

### Africa: place or symbol?

"In the manuscript version of the book, David and Catherine's sexual experiments are referred to as "tribal things," which suggests... "Africanization" in both physical and psychological terms."

"... it clearly **reflects the American literary tradition** in its depiction of a little boy's initiation into manhood through the trial of gaining spiritual independence from his father."

Matsushita, 2014

#### How we fixed it:

- ✓ Cut unnecessary text, transferring key part to title.
- Separated text into parts, which could then be revealed separately through animation.
- ✓ Used color to highlight key phrases.
- Increased font size.

## **Choosing Your Typefaces (Fonts)**

"Typeface" means the style of the letters. (Technically speaking, "font" refers to specific characteristics, but these days "font" is often used instead of typeface by non-specialists in graphic design.) You don't need the knowledge and skills of a graphic designer to use typeface effectively. Here are the basics.

There are two basic types of typeface: serif and sans serif.

A "serif" is a fancy mark on the edge of letters that was common in old style printing.

Serif Examples: Garamond, Times New Roman, Century, Georgia, Palatino Linotype

The word "sans" means "without" in Old French, so sans serif is simply font without that mark on letters.

#### Sans Serif Examples: Calibri, Gill Sans, Arial, Tahoma, Century Gothic

You can see the difference most clearly by comparing the underlined Century with the underlined Century Gothic. Looking at them altogether, you can see that the sans serif typefaces are simpler and have a more modern feel. \* This course book uses Calibri mostly, this page too.

For research presentations, it's generally best to **use sans serif** typefaces for text because these tend to be a little **<u>easier to read</u>**. The ease of reading is especially important in presentations because the audience needs to be able to read the text quickly.

It is also worth considering that for those who do not use the Roman alphabet in their first language, simpler typeface may have an even greater influence on reading efficiency. This is why I use Calibri typeface a lot.

Designers often recommend using a serif title with sans serif body text because this is more interesting. That's OK, but you shouldn't feel that this difference is essential for a research presentation. In a **presentation** situation, **ease/speed of reading is the 1<sup>st</sup> priority**.

While it's fine to use different typefaces, especially between titles and body texts, you should generally avoid using more than 2 typefaces on a slide. And it's usually best to keep the typefaces the same across your slides unless you have a special reason for varying them, such as giving emphasis.

You should **generally avoid** very fancy typeface such as **Brush Script**, **Chiller** or **Curlz**, which require much more work to read, unless you have a very good practical communicative reason.

Graphic designers seem to hate the popular *Comic Sans* typeface—in part because it's so popular. Actually, it's not too difficult to read, but it's best only to use it to suggest handwriting or informal speech in research presentations... and don't use it too much.

### **Font Size**

Font size is more important than most people think. Firstly, a common problem with research presentation slides is that font size is too small. The presenter has not considered what the slide will look like in the presentation venue. You need to consider what a person at the back of the room will be able to see. They should be able to read everything easily without straining. That becomes a problem especially on diagrams, including graphs, so be careful with those. Also, there are bigger and smaller screens, so at a conference you should connect to the projector and check your font size suits the venue well before you're scheduled to present.

Secondly, font size is used to organize information. Most obviously, slide titles are largest, subheadings are smaller, body text is smaller still. The font size is thus sending us useful information about the level and function of the information: what comes first, what is most important, what is most general or most specific. Research presenters tend to not use font size differences enough, or not clearly enough.

Making rules about how big your font should be on presentation slides is complicated. The examples of serif and sans serif typeface in the previous section on typefaces are all in 12-point font. So, you can see that different typefaces have different font sizes: a 12-point font in Century Gothic is much bigger than a 12-point font in Garamond. However, you can see that the common typefaces Calibri and Times New Roman are similar in size. So, in the demonstration below I'll use Calibri.



## **Title Slide Design**

The title slide is more important than most people imagine. There is a tendency for young researchers to simply give as much official detail as possible. This may because professors or seniors in their research group demand it, in which case you may not be able to change. But when you are presenting in a conference situation, the title is your visual introduction to the audience. It sends a message about your entire presentation and even your research. So, it's good to get it right. Look at these two title slides for the same presentation. Which would you prefer to see?



A and B are opposites. A has tried to give as much detail as possible; B has tried to give only information that is absolutely necessary. From a design perspective, B is obviously much better, so even if you think you need to give more information than B gives, you should aim more towards B than A.

### How do we get from A to B?



- Reduce title content. Even if you are publishing the research under that title (and you
  probably wouldn't because it's too long) does the audience need all that information at the
  beginning of your presentation? Usually, no. So, it's appropriate to reduce information such as
  the location and subject group, especially if you are drawing conclusions or applications that
  are not so specific.
- **2. Remove repetition.** In this example, "Nagoya University" is stated twice. That is pointless, and it's creating visual noise.
- **3. Reduce affiliation details.** You may have stated this in a "bio" available to the audience online and/or you may mention it in your self-introduction. Or the information may simply not be relevant to your audience.
- **4. Remove the email address.** It is unlikely that someone will type or write down the address on a title slide in order to contact you. If you really want people to have your email address, use a QR code to connect to your webpage or have it on a slide during your Q&A.
- **5. Remove the date.** Unless you are publishing or transmitting the slides online, the date serves no purpose for the audience. They know what day it is.
- **6. Use font variation.** Make the difference between the title (most important) and subtitle clear through different sized font. Also, ensure that your personal information is significantly smaller than the title.
- 7. Reduce the logo size. So long as people notice it, it's fine.
- **8. Create white space**. You can do this not only be reducing text but also by separating the different elements: title, personal information, logo.
- **9.** Use color. For example, this can further distinguish your title from subtitle, or the title from personal information. In the above case, the personal information color matches the logo.

## \* Your title slide needn't always look like the "minimalist" B model above—you can even add related images—but you should aim more toward B than A.

### **Images: Efficiency and Effectiveness**

#### "A picture is worth a thousand words"

#### Why don't researchers use enough images?

It's a weird thing: I've seen thousands presentations by graduate students and undergraduates, and on the whole, undergraduates use images more often and better than graduates in their slides. Graduate students and other researchers actually seem to hesitate to use images, or they use them poorly by making them too small or burying them among other information. Why? It's complicated, but there appear to me to be four main reasons:

- 1. They are just transferring information from articles or research records, and these don't have a lot of images.
- 2. They are used to presenting mostly to professors and colleagues in their field who are dealing with the same environment, same equipment as themselves, and therefore don't need images to explain.
- 3. They feel that abstract information in the form of words and/or numbers looks more academic, and they want to impress their professors and colleagues.
- 4. They are filling slides with words that they then read to the audience. The slides act like a script.
- Number 2 above is a pretty good reason if we are presenting inside our field, I think. The rest are awful.

#### **Images are Efficient**

Think of your own experience. Which do you find easier to understand: written words or pictures? To some extent, of course, it depends on the complexity, familiarity and importance to us of the words or pictures. But I think we can agree, and there is evidence to support the idea, that pictures are easier for us to process.

In the book *Thinking Visually* (2010) Stephen Reed points out that "our cognitive abilities to comprehend, remember, reason, solve problems, and make decisions depend on a rich combination of words and images" (13). Long before that, Levie and Lenz reviewed 155 studies on the effects of illustrations accompanying written text and found that illustrations improved understanding in 98% of cases ("Effects of Text Illustrations: A Review of the Research." *ECTJ* 30.4 (1982)).

I don't want to bore you with the academic debates on this topic, but one quite strong explanation, at least in part, for the ease of understanding through pictures is that we humans have been doing it for a long time, tens of thousands of years. We have been using pictograms (words that somehow resemble the thing they are referring to) for at least three thousand years. But more abstract alphabets are a much newer, though very important, device. So, we can say this: pictures run more deeply into our (pre)history, and probably our DNA, than written words. On top of that, with the spread of visual communication through TV, then the Internet (think of YouTube), we are more than ever surrounded by images.

How does this relate to presentations, and especially to slide design? We know that the biggest challenge of research presentations is to communicate complex information in limited time. If we are able to process images more comfortably than written words, then our slides should reflect

that. This is even more the case when communicating to people through a language that is not the first language of everyone involved. Pictures are often easier to understand, and also cross language barriers.

What is tells us is that we shouldn't rely on slides simply to give a written version of the words we speak during a presentation. While putting keywords, phrases and sentence on slides is certainly a good idea, it's not the only reason for having slides. "A picture is worth a thousand words" is a common proverb in English, and there are good reasons for that: the first is, images are often more easily, more quickly understood.



TimJN1, CC BY-SA 2. via Wikimedia Commons

#### **Images are Effective**

Did you know that among scholars who study communication there is a concept called PSE, "picture superiority effect"? I think you can guess what this means. It refers especially to the power of images to create neural traces in our brain that we can use later; in other words, it's about what we remember, and thus about the lasting impact of what we present. This runs from the short term—allowing the audience to make a connection to a point you made earlier in a presentation—to the long term, remembering something in your presentation even years later.

Again, I don't want to take your time with academic debates, but one theory for this, based on empirical studies, is that when we see an image we store it both as visual information and also through the sounds of words associated with the image. It's called "dual coding theory" and it runs way back to Paivio (1971).

You are a researcher, not a salesman, but I guess you understand the value of having the audience remember what you have presented. In one way or another, your future and the future of your research may depend on it.

## **Photography Power**

I've just discussed why we tend not to use images enough, and why that's a problem and a waste of resources. This is especially the case with photography, which some researchers seem to have a weird prejudice against. As usual, let's first ask why?

In a few cases, photography may infringe upon privacy or give away research secrets, and of course these need to be protected. To some degree, hesitating to use photos may also be because of worries about copyright of images, but there are plenty of "creative commons" or "public domain" images available on the internet that are usable (so long as you give some kind of citation) so that's not a great reason in many cases. Moreover, I recommend you record your research with your own photography... almost everyone carries a camera all the time these days.

This will seem strange, but I've thought about it a lot and I think a big reason for researchers' prejudice against photos is that they are the most realistic, concrete (具体的) form of image. But surely that's a good thing?! Right, but some researchers seem to feel a kind of subtle pressure to be as abstract (抽象的) as they can: abstract = academic! That means words, numbers; if we have to use images at all, then maybe some nice complex diagrams. That seems to be the preference for many presenters.

Let me explain why and where images can make a wonderful contribution to a presentation alongside words, numbers and diagrams, especially outside your research group.

### **1. Context/Background**

The main problem we face at the beginning of a presentation is getting the audience to understand how your research relates to the world which we share with them. The further away from our field the audience is, the bigger this issue becomes. In the discussion of presentation structure for outfield audiences I said this: "Start in the real world, finish in the real world." That is the best way to establish a connection with the audience. And there is often no easier, quicker... that is, more efficient... way to do this than a photograph.

A photo can take an audience immediately from the specificity of your research to the shared world they can understand and relate to. For example, if you are about to talk about your research on developing a strain of rice for use in Africa, then a photo of a farm there would at the speed of light take the audience to that context. If you're going to explain your work on a tiny new mechanical part to improve electronic cars, show a car. This will make it real and understandable to the audience, very quickly. Describing research on gambling in Japan?



Tischbeinahe, CC BY-SA 3.0, via Wikimedia Commons

### 2. Motivation

This could come under the background, but if you are trying to give the audience a sense of why your research is important, then a photo may do it best. If your technology will reduce global warming, show an image or two of the catastrophic effects of our world heating up. This is not just about efficiency in your communication, but also about engaging the audience. A photo will engage the audience not just intellectually but affectively, perhaps even emotionally. I'm not saying you need to make them cry... you definitely don't... but you want to make them feel like listening to you, and photos can do that very well.



U.S. Navy, Jeffery Russell, Public domain, via Wikimedia Commons

### 3. Method

Photography (and video) is especially good for showing any equipment you use in your research. Of course, colleagues in your lab don't need to see that, but it could really help someone from outside to understand how you conducted an experiment. You don't have to choose between a diagram and a photo—you can use both!



Luca Raimondi et. al, University of Nottingham., CC BY-SA 4.0 via Wikimedia Commons

### 4. Results

Whatever your field, there are often good reasons to show results photographically, precisely because it's concrete. It can be excellent for making visual before/after comparison, such as in a medical procedure, for example.



Preoperative and postoperative image of a dynamic smile reconstruction Sue Campbell/U.S. Air Force, Public domain, via Wikimedia Commons

### **5.** Conclusion

Take the audience back to the real world so they remember the importance of your research.



Africa Rice Center, CC BY-SA 3.0 <https://creativecommons.org/licenses/by-sa/3.0>, via Wikimedia Commons

### **Animation: an Overview**

Students are sometimes told to avoid using animation because it's distracting.

It's true, animation is distracting if it's simply being used as entertainment, but animation has much more important functions than that. Most importantly, animation allows you to:

### **Control the flow of information:**

By revealing information gradually—and sometimes hiding information after it has been shown you are able to control the audience's focus and attention. For example, if you show a slide containing several points at once, the audience will usually try to read them. They are thus distracted from what you are saying at the time. The audience may even be overwhelmed and lose interest completely. If you show parts one at a time, the audience will move their attention along with your speech.

### Highlight to focus attention:

You can use animated shapes and effects to draw the audience's attention to specific points on a slide. See the "Don't laser point—animate!" section below.

### Show a moving reality.

Things move in reality, and your research probably involves movement of some kind, such as in using or creating technology, for example. So it's useful to show such movement to better communicate the reality and to help the audience better understand processes.

\* If you're using graphs, these too can be animated using the presentation software. See below.

\* Consider using GIF's (animated still images) to show movement and also 3-dimensionality. You can even make these yourself if you have the still images or video. Consult internet sites or people in your research group on how to make them.



## **Visual Transitions**

It's useful for the audience if you visually mark the transitions between parts: for example, from the introduction to the body, or from the method to results). Actually, it provides a little break, which can help maintain audience attention. If you give a logical connection through your speech ("So, when we did our experiment, what results did we get? Let's look.") and a visual marker at the same time, the audience easily makes the shift and feels comfortable.

Transitions can be visually marked in various ways. The simplest is to have a label at the top of the slide such as "Results." Then decide if you want to have that label on all slides in the results section or not. The downside to this is that it creates a little more clutter (visual noise) on all your slides. See the "Outline" section below.

Another method—an especially clear one—is to use transition slides. You have a slide with just "Results" written on it, nothing else. It works best to have this in a different color from the other slides (but the same color for each transition) because this gives the audience a clear signal.



Or you can try a running outline, showing the outline and your location in the presentation flow each time you transition between parts. See the "Running Outline" section below.

Also, consider using the "Transitions" (画面切り替え) function in the PowerPoint top menu. These should not be used too much—maybe only for transitions between parts—but they can be effective if used carefully.

## Don't Laser-Point... Animate

The laser pointer used to be innovative technology allowing presenters to focus the audience's attention on a certain part of a screen without moving. It replaced the old physical pointer, a stick that had been used by school teachers for centuries. But the laser pointer has itself become outdated technology in the presentation context, because presentation software allows us to highlight parts of the slide in other, more accurate and more effective, ways. Compared to animation highlighting techniques, the laser light wandering around the screen, moving erratically in the hand of a nervous presenter, is really quite hopeless and rather unimpressive.

Laser users tend to talk to the screen instead of the audience. Using animated pointers allows you to face the audience and interact with them more directly. This is more important than you think.

To be honest, when I see someone waving a laser pointer at the screen during a presentation I just assume they don't know how to create animation or they were just too busy or too lazy to prepare slides that used such techniques.

### How to make animated pointers

You can learn this by exploring your presentation software. You can also watch various tutorials online on this subject: just do a Web search under "animating slides" and the name of your software (such as "PowerPoint") through your search engine. In case you have no experience, here are two simple techniques using PowerPoint.

### **The Animated Arrow**





(Image: Flagstaffotos)

- 1. In the top menu click "Design", then in the Design menu click on "Shapes."
- 2. Scroll down the "Shapes" menu to arrows and find one you like. Click to place it on your slide.
- 3. Drag and drop the arrow to the place you want, then adjust the size and shape to suit yourself.
- 4. Click on the arrow, then in the top menu click on "Format." Now you can give the arrow the fill color, outline color, and outline thickness you prefer. Make it bright with strong contrast against the background, so the audience notices it easily.
- 5. Add animation so you can reveal the arrow at the suitable moment in your presentation. To do this, in the top menu, click on "Animation." In the Animation menu click on your preferred type of animation to reveal a shape. "Fade" is the simplest. A more noticeable option is to reveal the arrow gradually in the direction of the arrow itself. To do this, click on the "Wipe" option, then adjust the direction of the wipe inside the menu.

6. You can further highlight the arrow through other animation effects if you like, including repeating the wipe.

### The Animated Circle or Box



#### (Image: Flagstaffotos)

- 1. In the top menu click "Design", then in the Design menu click on "Shapes."
- 2. Scroll down the "Shapes" menu to the circle or box shape you like. Click to place it on your slide
- 3. Drag and drop the shape to the place you want, then adjust the size and shape to suit yourself.
- 4. Click on the shape, then in the top menu click on "Format." Now remove the color from the box: in the "Shape Fill" menu click "No Fill." Now you can place the shape outline around the part of your slide you want to highlight. You can also give the shape the outline color and line thickness you prefer. Make it bright with strong contrast against the background, so the audience notices it easily.
- 5. Add animation so you can reveal the shape outline when you want to point to something on the slide. To do this, in the top menu, click on "Animation." In the Animation menu click on your preferred type of animation to reveal the shape. "Fade" is the simplest. There are also extra highlight effects available to help ensure the audience sees it.



## **Animate to Control Information Flow**

As mentioned earlier, a primary function of animation is to control the flow of information and audience focus during a presentation. This is something that most inexperienced presenters don't think of. They tend to think of slides as a static picture (or worse still, as a copy of a written text such as a journal article).

### Slides are not separate and static. They create communicative flow.

In order to reveal information in a gradual and manageable way for the audience, a recommended approach is what designers call a "build." It's called that because we build the parts of a slide, diagram or image piece by piece. By doing, that parts are revealed gradually, so the presenter can guide the audience gradually through the introduction of information.

A build is usually made by adding parts through animation in series. You can choose through the presentation software to reveal a part during the presentation manually (clicking) or automatically (automatic animation timing settings).

Doing this gives a nice clear sequence and audiences really appreciate it. As with using animated highlighting/pointing, it also frees presenters from the screen because they don't need to point to parts in the sequence. This allows them to have direct contact with the audience while they are speaking.

Sure, it means more work during the preparation process, but it's going to make your presentation more effective and more enjoyable for the audience and yourself. It will actually reduce the amount of work you need to do while presenting.



### Using a "Build" to Control Flow



## **Outline Slide Design**

There are no rules for outline slide design.

Firstly, an outline can be called an "outline," "flow," "structure" or "agenda." You could even call it a "sequence" or "trajectory" if you want to try something different.

The basic example below has a typical structure, flowing from top to bottom.



Here are some other examples, provided by my students.

Outline
Previous Studies
Research Question
Subjects
Results
Analysis







The design below gives the audience an idea visually of how long each part of the presentation will take.



If you want to make your presentation more dynamic and interesting, use animation to reveal parts in sequence as you describe them.

### **Common problems**

- 1. Sometimes presenters show the Outline slide for 3 or 4 seconds and say "Here is my outline" and then move on. Don't do that. It's a waste of time and annoys the audience. If you don't think an outline is needed then don't do it; if you give an outline, do it properly.
- 2. Sometimes the Outline contains too much detail and terms that the audience doesn't understand. That can be annoying too. That's why it's best to <u>give the Outline AFTER you've</u> <u>described key terms in your introduction</u>. If there are terms in the Outline that you'll explain later, but you want to include them here, then tell the audience you'll explain the terms later.

### **Running Outlines**

A running outline is an outline that you continue to show throughout your presentation, so the audience knows exactly where you are in the sequence. How you do that is for you to decide, but here are a couple of examples.

The design below basically shows the Outline slide at the beginning of each section as a transition signpost. The present section is highlighted in some way. Because it shows the entire Outline each time, the audience can see where they are in the overall sequence. These slides also put little breaks into the presentation, which some audience members like.

<b>Presentation Outline</b> Equipment/Subjects Procedure Preliminary Results Discussion Limitations Future plan What it could mean	Presentation flow Equipment/Subjects Procedure Preliminary Results Discussion Limitations Future Studies What it could mean
Presentation flow Equipment/Subjects Procedure Preliminary Results Discussion Limitations Future Studies What it could mean	<b>Presentation flow</b> Equipment/Subjects Equipment/Subjects Procedure Preliminary Results Discussion Limitations Future Studies What it could mean

### **Section Signposts**

Here is a much more minimal approach. It's just a textbox signpost, usually in a top corner of the slide. It doesn't tell the audience where you are in the presentation sequence exactly, but these signposts can appear on every (or most) slides, so the audience always knows what section you are in.



### **Running Top Menu**

This takes a little more space at the top of a slide and may be adding "visual noise," but it gives the audience both the present section and the position in the overall flow throughout the presentation.

round	Main Idea	Method	Results	Discussion	Conclusio

### **Running Side Menu**

Same as above but the menu is on the side. This takes more space, but if you are using a "widescreen" 16:9 slide ratio, it can be effective.



# **Presenting Data**

## **Data Visualization Strategies**

For scientific, including social scientific, presentations, data visualizations through charts is obviously extremely important. Just imagine trying to communicate numerical data entirely through your speech. It would be almost impossible in many cases... or at least almost impossible to understand. Here is a brief review of the most commonly used forms of data visualization, with examples created using Excel (also available through PowerPoint).

#### **Table**

This is the most precise way to represent numerical data because you can show the exact numbers. The columns and rows make navigation reasonably easy. It also allows a

The downside is that mentally processing the numbers and making comparisons requires quite a lot of mental work by the audience.

Fruit Sales	Oranges	Bananas	Apples	TOTAL
January	4300	2420	2000	8720
February	2520	4400	2080	9000
March	3510	1830	3050	8390
April	4530	2810	5420	12760
TOTAL	14860	11460	12550	38870

#### Bar graph/chart (clustered)

This is a graphic representation of numerical data. Here I have transferred the data from the table above to what is called a "clustered bar chart" because it shows different results within each category (month). You can see that making comparisons between categories (months) and subcategories (fruit types) is much easier because of graphic differences in bar height which we can immediately recognize.



The downside is that it's not so precise. We can only guess the numbers from the graph.
#### Stacked bar graph/chart

This shows not just the different data for each category, but also the totals for each category (month) and the proportion of each result within those categories.

The downside is again that we don't see the precise numbers, but also that comparing the subcategories (fruit sales) within each category (month) is not so easy as in the clustered bar graph where we can easily compare the height of each subcategory.



#### Line graph/chart

A line chart is good for showing change over time as the lines clearly indicate up and down movements. So, it can be good for identifying and comparing trends.

The downside again is that it doesn't show the totals of the subcategories (fruits) combined. Nor does it give a clear sense of the proportion of the total of each subcategory (fruit).



#### Area graph/chart

This can give a lot of information, most notably the proportion of the whole of each subcategory (fruit) over time. So, it's good for showing total and relative trends.

The downside is that the differences are not as easy to process mentally as those in simple bar or line graphs.



#### **Pie graph/chart**

This is good when you want to focus on relative proportions of categories at a specific point in time. It's a relatively easy representation for an audience to mentally process basic information.

A downside is that it doesn't tell us anything about changes over time. Also, unless you add the numerical values (as I have done below), it's rather imprecise. The circular form may be good for quickly indicating rough proportions, but it's not the easiest or best for seeing subtle differences.



#### Scatter graph/chart / Scatterplot / Scattergram

This is in a sense the simplest type of graph in that it usually involves simply two variables plotted against each other. It's especially useful for finding and displaying correlations between data sets that may not be immediately seen in the numerical form of a table. Here I've inserted a "trend line" (green) to indicate the rough correlation.



A downside is that it's generally designed for only two variables.

#### **Dual axis graph/chart**

This is used to show a comparison of two sets of data that share one variable (in this case the X axis) but have different units on the other (2 Y axes). It can be excellent for demonstrating a relationship between data sets in different areas.

A downside is that the two Y axes take some time to distinguish and relate to the graph content, although this problem can be reduced using color coordination (see below).



#### Radar (Spider) Chart

These are often used to show quantitative levels of different variables within one ore more case. It's good for showing strong or weak points, for example through comparison between the variables. The chart below shows that bananas are especially good as a source of Vitamin B6.

The downside is that the circular structure is not so easy to read, and it may also falsely suggest relationships between variables that are quite arbitrarily placed next to each other.



## Summary

Of course, this is not a complete list of charts. There are others such as bubble charts, Mekko charts, distribution maps which may suit your purpose. What I've shown are just the main types, which can be created through commonly used software, including PowerPoint.

There are 4 main points that come out of this discussion of visualizing data through charts.

1. Charts are an effective, efficient way to present data, and this is especially important in the context of presentations where you have limited time to give the audience the information they need.

2. Charts are not difficult to create with the software commonly available to us. I was able to make the charts above quite quickly and easily even though, frankly speaking, I'm not great at these kinds of things. If I can do it, you definitely can, and there are plenty of online sites to help you if you need it.

3. Before making your chart, it's worth considering your options. I've given brief reviews of the main benefits and downsides of each type because you need to consider those when designing visual display of data for your presentation. By the way, software such as Excel will even offer you some recommendations. (See the top menu when you do the graph "insert".

4. Creating visual displays of data may take some time at first, but it gets easier. Moreover, it can actually be fun, and will give you a sense of achievement and empowerment.

## **Chart Design Advice**

#### Design for the audience

When you are creating your chart, it's OK to think of what you like, but put the audience's experience first in your mind. Imagine a person at the back of the room in which you intend to present (or an online viewer): what will be easiest for them to understand... quickly. Remember, presentations are not like books or articles—the audience needs to understand your content in limited time. Your design should make that possible. The following points are all related to this first principle.

#### Avoid "chartjunk"

In the book *The Visual Display of Quantitative Information* (2001), Edward Tufte, who is a respected figure in the area of data visualization, describes "chartjunk" as "elements in charts that are not necessary to comprehend the information." Again, since in presenting we need to ensure rapid comprehension by the audience, this is very important. Basically, as I've mentioned in other areas of design, clear away information and imagery that is not helping in this regard. To do this you will need to fight against two common tendencies among researchers when designing slides which cause chartjunk: 1. Trying too hard to impress the audience, or at least senior professors, with detail; 2. Trying to make a slide more entertaining. You may need to make some compromise on the first point depending on your situation, but as much as possible, opt for clarity and cut the unnecessary detail in text and graphics.

#### **Use Color for clarity**

Sure, you don't want your chart to look like a Christmas tree, but creating simple contrasts of color to aid quick understanding is a great idea. Look at the example slides about "Fruit Sales" above. I used a very simple, and intuitively recognizable color scheme related to the subcategories—green for apples, yellow for bananas, orange for oranges—to reduce mental processing time for the reader/audience and also to aid memory.

#### **Consider font size**

From my experience, small font issues are most common in charts, especially when the chart has been pasted from an article, book or webpage. Presenters overlook the fact that an audience has limited capacity to change their view by moving closer or enlarging the graphic as they can do in those other cases. So, you have to do your best to make the text, especially labels on axes, big enough and bold enough for all of the audience to see.

#### **Avoid sideways text**

This is a small but significant issue, because it can be annoying for an audience. Sometimes presenters put labels on the vertical (Y) axis of graphs sideways. Why? Basically, because it takes less room, so it makes design easier. The problem is it's difficult to read. If we're reading a book or other paper publication, you can just turn the page around 90 degrees so you can read it easily, but you can't do that with a slide, and audiences are a bit embarrassed to move their head 90 degrees to read in public. If you're pasting something from elsewhere with sidewise text, use a text box to cover that text, and another text box to insert a nice horizontal label.

## **Explaining Visualized Data in English**

## Which word: chart, graph, plot, or table?

Don't get stressed about it. There's a lot of overlap of terms. "Chart" is the most general term and so it is safest. Graphs usually represent relationships between mathematical data.

## **Give the theme**

A slide or chart title is good, but also say to the audience directly what the data is basically telling us.

## Explain the axes.

This graph shows...

"The horizontal (X) axis shows/indicates time in units of 1 year."

- "On the vertical (Y) axis you can see the level of emitted sound, in units of 10 decibels."
- "The units on this axis are..., ranging from 0 to 150."

## **Comparing difference**

"This chart shows the difference between A and B." "If we compare A and B, you can see a significant similarity/difference/correlation."

## **Describing change**

Of course, when we're talking about the past we can usually use the past simple form of the verb. (Example: "Chocolate consumption in Japan <u>increased</u> between 2000 and 2017.")

But we can also use the verb "to be" plus the noun form: "There was <u>an increase</u> in chocolate consumption in Japan between 2000 and 2017."



Quantitative Change					
+	_				
increased (v, n)	decrease (v, n)				
rose (v) a rise (n)	fall (v, n)				
climb/ed (v)	is reduced (v) / a reduction (n)				
goes/went up (v)	drop (v) a drop (n)				
grows/grew (v)	decline (v, n)				
	reduce (v) a reduction (n)				
Qualitative Change					
strengthen (v), a strengthening (n)	weaken (v), a weakening (n)				
improve (v) / an improvement (n)	decline (v, n)				
	deteriorate (v), a deterioration (n)				
	worsen (v) a worsening (n)				
	slump (v, n)				
No Cha	nge (0)				
remained stable (v)					
remained unchanged					
remained/stayed constant	<b>-</b>				
remained the same					
held steady					
maintained the same level					
Unstable Situation					
fluctuated (v), a fluctuation (n)					
be(came) erratic $\Lambda \Lambda \Lambda \Lambda$					
undulated (v), undulation (n)					
' \					
From change to no-change					
leveled out (v) a leveling out (n)					
flattened out (v) a flattening out (n)					
plateaued (v) a plateauing (n)*					
Тор	Bottom				
peaked at (v) reached/hit a peak at (n)	bottomed out at (v) a bottoming out (n)				
$\mathbf{A}$					
$\sim$	dipped(y) = dip(y)				
	aippea (v) a aip (n)				
	$\vee$				

Describing the <u>Amount</u> of Change/Difference					
Adjectives (形容詞)	A <u>dverbs (</u> 副詞)				
big	a lot				
remarkable	remarkably				
marked	markedly	1911: "Inere was a marked increase in carbon			
substantial	substantially	emissions."			
considerable	considerably				
significant	significantly				
moderate	moderately				
slight	slightly				
minimal	minimally	例: "Carbon emissions decreased slightly."			
Describing the <u>Rate</u> of Change					
<u>Adjectives (形容詞)</u>	<u>Adverbs (副詞)</u>				
rapid	rapidly	+			
quick	quickly				
sharp	sharply				
steep	steeply	/ 例:"Carbon emissions increased			
swift	swiftly	/ sharply. "			
sudden	suddenly				
dramatic	dramatically	, _			
steady	steadily				
gradual	gradually				
slow	slowly				
gentle	gently				
Verbs for Big Fast Change					
rocketed (v)		plummeted (v), a plummet (n)			
soared ( v)	4	collapsed (v), (a collapse (n)			
surged (v) a surge( n)					
boomed (v,) a boom (n)					
		例: "Car sales plummeted last			
	1	· · · · · · · · · · · · · · · · · · ·			
Describing Change with Time Tenses					
"From (1945) to/until (1965) banana consumption increased"					
"Between and banana consumption increased."					
"After/From banana consumption increased."					
"Before banana consumption had decreased." (*to compare before and after a point					
in time)					
"Since (1965) banana consumption has increased." (*"since" is only for past to present.)					
"In the future, banana consumption will probably remain much the same."					
_,		,			





## **Example Data Explanation**

Nigeria's banana production and rainfall, 1998-2012: Opeyemi et al., 2016.



**[Background]** Bananas are important in the life of Nigerians. They are a key element of the diet and contribute to the economy through domestic and foreign sales. For those reasons, it is vital to seek stability in banana production, as well as further development. One factor that we might expect to affect production is rainfall, and research published by Opeyemi et al. in 2016 supports that dependence, indicating the need for action in banana farming.

**[Description]** This dual axis line graph from the Opeyemi article shows the relationship between rainfall and banana production in Nigeria from 1998 to 2012. The horizontal axis shows the year. The left vertical axis shows banana production in units of 20,000 tons and this is indicated over time through the blue line inside the graph. The right vertical axis is annual rainfall in millimeters, with the change over time marked by the black line inside the graph. The graph shows quite erratic fluctuation in both rainfall and banana production and, most importantly, significant positive correlation between the two. For instance, production bottomed out in 2005, following relatively low rainfall in the preceding two years; then production rose dramatically with rainfall, peaking in 2009.

[Discussion] Overall, the data suggest that Nigeria's banana production is highly dependent upon rainfall in the period preceding harvesting. Rainfall is subject to considerable variation yet cannot be changed, so strategies are being pursued to stabilize banana production. These include improving water storage by building dams, as well as enhancing crop irrigation through the latest irrigation technology. Also, work is being done in genetically improving banana plants to enable growth in dry conditions.

# Question Time (Q&A)

## The Value of Question Time

## ... and why you can relax a little

To understand the function of question time at the end of presentations, it's best to first review why we do presentations at all. That will seem silly, but the funny thing is, many graduate students and researchers somewhat misunderstand the function of presentations. This is not entirely their fault, because when presentations are first practiced, perhaps in high school, we may actually be assessed, graded. In fact, even at university that happens, especially at undergraduate level. Then, when we get to grad school we are told we need to do a presentation for our professor, but maybe no one tells us why.

Actually, one reason professors may give is that it's good practice for giving papers at academic conferences in the future. But that still doesn't tell us why people go to conferences and do presentations in the first place. So, many people are giving presentations without really having been told why they need to. We then see question time at the end of the presentation as the worst part of that test, because it's the part we can't be completely sure of. However much we practice our presentation and however well we present, difficult or weird questions might be asked at the end that we just can't answer.

But why do people ask those questions? To test you? In the real world, usually not. Question Time is not an oral exam. They ask you because they're interested. They are looking at your research question and asking themselves questions about it and then they are hoping you can clarify things for them. But **they're also asking those questions** to help you. They know that research is all about setting and answering questions, even if they're difficult. So these audience questions make us think about points we may have missed or are not giving enough attention to. That's the function of question time.

## **Quick Tips**

- Say thank you and/or compliment the questioner if they ask a good question.
- Remain polite at all times... remember it's not an exam or competition.
- Practice, but don't focus on language. So long as they understand, most of the audience won't focus on minor grammar mistakes.
- It may be good to move away from the speaker's podium during question time to get a better connection with the audience.
- > Don't be afraid of silence. If you need time to think of a good answer, take it.
- Keep good eye contact. Don't be afraid to smile naturally.
- Mostly, just relax and be yourself.



## **Slide Setup for the Q&A**

## Preparing slides especially for Q&A

Although you can never be sure what questions or comments you will face during Q&A, you can often guess, then prepare slides that will help you explain. And you can have lots of data slides ready in case someone wants more detail. It's easiest to place these at the end of your presentation slide show so you can refer to both the slides in the presentation and the special Q&A slides easily within the same file.



## Setting Up the Screen for the Q&A

You've just finished your presentation and you feel a sense of relief. Now your mind starts thinking about the challenges of question time. But before that, firstly, breathe deeply and relax.

Now, you need to set up the slide show display in the laptop computer so that the audience sees whatever slide you want them to see while you can see all the slides. This is really important because it means the audience doesn't have to watch you scrolling through slides to find the one you want. It's more efficient and looks more professional.

## How to set up the display.

In "presenter view" mode, click or tap the "see all slides" icon below the present screen image on the laptop display.



Now the audience can see whatever slide (if any) you want them to look at...



But YOU can see ALL of your slides...



When you need to refer to a specific slide during the Q&A you can now just click on or tap (on a touch screen) the required slide. In short, there's no reason to ever allow the audience to see you scrolling through slides.

## What's on the Screen During the Q&A?

This is something you need to deal with long before your presentation, as you're preparing. It's much more important than most people imagine. Let's review some common options for Question Time...

### **Showing references:**



It may be important to show references at the end, and <u>it may be OK for a little while</u> as you prepare for Q&A, but if you leave them on the screen throughout Q&A it's both distracting and boring. So it's not recommended.

### **Future Research:**



You might leave this on the screen because it's the last slide in your presentation. That's not a good reason to leave it there during Q&A. If you want to orientate discussion during the Q&A towards the future, it's actually quite good. On the other hand, if you want to focus discussion on the research you've just shown, this would be a distraction.

## Acknowledgments:



Again, you may be obliged to show this at the end of your presentation, you may even want to show it if you really appreciate contributions to your research. It's not terribly distracting, but it's not great for the entire Q&A... kind of boring.

### **Appreciation:**

Thank you for your attention!

It's polite and friendly to say "thank you," so it's OK. But we see it at the end of so many presentations that it doesn't have much meaning. And, again, leaving it on the screen throughout your Q&A isn't really useful.

## Title slide



This is not great but it's OK because it keeps the focus on your main idea. It may even be useful as background if someone asks you a question that is not related to your research: you can point to the slide as you explain that what the questioner is asking is not part of your study. It also includes your name and affiliation. It would be good to change the design a little from your actual title slide so it doesn't look like you're being lazy and because you may also want to add your email address (which you shouldn't need on your title slide).

## All slides visible to audience

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■ 10 10 10 10 10 10 10 10 10 10 10 10 10	Au-5- Q 回 D5-   カリrill ノート ズーム クロクリタイズ ロース ロース   方作 パート ズーム ウロクリタイズ ロス ロス ロス   数示 0 ズーム カラー/的レースカール ロス ロス ロス	世 公式表示 中 市 当単社で表示 中 田 全部の形態 切り登記。 マクロ ロリ登記 マクロ マクロ マクロ マクロ マクロ	
Why and how we should develop biogas 3016.01.29 TAING Keughuot	Background Population 15 million 30% line in rural 73% are farmes	Agriculture mocion mocion production	Manure (下矩) : 0 ● •••
T Methods from manuer (pg/yer/hoad)	2 Dbjective ^ To promote aximal production to farmers * To reduce remoloure as from animal production 	Biogas?	4 • • Biogas Structure
Benefits of biogas	Efficiency in diseases control > Anaerobic > Aerobic	Reduce greenhouse gas emission	
9	10 *	11	12

Some people use this so the audience can point out a slide they want to see. OK, but it's "visually noisy" and not recommended.

## **Related image**



A photograph, or at least a simple illustration, related clearly to the main idea of the presentation can help to keep focus during Q&A. It also helps you to leave a lasting impression in the minds of the audience because we are more likely to remember something if we can actually see it.

#### **Blank screen**



The blank screen is an excellent way to keep the focus on you and your interaction with the audience. It can actually create a sense of immediacy and closeness between you and the audience. If you need the white light of the projector in the darkened room, press the "w" key while in the "presenter view" mode in PowerPoint. If you don't need that light, switch it off by pressing the "b" key. Now the screen goes blank and it's just humans in the room. You can move around freely and walk in front of the screen. You can easily start the slide show again by pressing the same keys if you need to refer to slides during the Q&A.

## Who Asks Questions, and Why?

It's a question that not many people think about for very long: why do people ask questions during the Q&A? You could say, "What difference does their reason for asking the question make? The important thing is answering the question." But the Q&A time is short and valuable to you. You can save time if you have a rough idea of why the person is asking because you can provide the kind of answer they're looking for, and you can also avoid wasting time on questions or comments that are not really helpful for you or most of the audience. Let's look at some different motivations for questions, and how you can best manage them.

#### **The Cooperator**

The best kind of questioner is one who is familiar with your field and genuinely interested in helping you address issues in your research. They are invaluable, and there may be a good number of this kind of attendee at your presentation, though they will likely have varying degrees of knowledge of your specific issues. They are cooperative problem-solvers who take pleasure in working together to find the best methods and solutions. They often make specific suggestions. You should do your best to respond with gratitude and the same spirit of cooperation.

### **The Critic**

This person may also be a cooperator at heart, but they take a direct and critical approach to issues which you might find confronting. Their mind works in a skeptical way, always trying to identify weak points in logic or evidence or technique. Mostly they are not cruel people, but they are focused more on issues than on human relations, so they can sometimes appear overly aggressive. As far as possible, do the same and focus on the issues not the person: there's probably no need to be offended, and even if it is offensive you shouldn't escalate conflict. Concentrate on the content.

#### **The Examiner**

This person, often someone more senior, feels it is their role to test your knowledge and your ability to address issues in the Q&A. In fact, it could be a Professor in your Department, so it may be part of their job to do that. They're not just trying to make you miserable for no reason. So, show them knowledge and communication skill. But don't imagine this kind of examining is what most audience members at conferences are doing. They're not.

### **The Expert**

This person is not necessarily better qualified than the cooperator or the critic, but their motivation is different. For them, it's not about your research: it's really about themselves. They take some kind of pleasure in showing their specialist knowledge or skill to you and the audience. If the question or comment is useful, be grateful and engage with them. If the knowledge given is not helpful, simply acknowledge it and move on.

### **The Debater**

Debate has a long and proud tradition. By debating ideas together we may be more likely to produce better results: from competing antitheses to useful synthesis. Some people, and to some degree certain cultures, favor this way of working through problems. Such people are not just critics, though related: they actually want to push both you and themselves to new and possibly

better ideas and techniques. The debate itself is crucial to that process, so they may not just give their question or comment, listen to your answer, then shut up. They may want to continue debating and it can indeed be useful but it's going to take time. Whether you engage in debate, back and forth, is up to you. If you don't want to lose time on that right now, suggest further discussion later.

## **The Arguer**

They are a minority, thankfully, but there are some people who debate not because they view it as a constructive route to improvement, but because they have an emotional need for argument. Best not engage. Acknowledge the input and move on, with an invitation to later discussion if it helps and if you really want to do that.

## **The Visionary**

There is a kind or person—maybe it's you!—who not only sees the issues but is easily stimulated to imagine something beyond what is. For example, they may envisage applications of your idea or technology to some other area you hadn't thought of. Sometimes, this could be both inspiring and useful; sometime it's crazy and off the point. You need to decide and respond accordingly— of course, politely in either case, and keep in mind that a certain visionary craziness has a crucial role in research.

## **The Storyteller**

Some people begin with background to their question or comment. And sometimes it seems they have no sense of time because they're eating up your Q&A. If it's taking too long, gently interrupt and ask them if they have a question or comment.

## **The Machine Gun**

Some people want to ask more than one question. They may say at the beginning, "I have two questions." You need to decide whether you will accept both at once, or ask them to give one question now, and you'll come back to them if there is time. Some may give you no warning, but after you've answered their first question, they may throw you another question. If it's related to your answer to the first question—called a "follow-up" question—it may be OK. If not, you have to decide whether to take it or not.

## **The Comedian**

Sometimes someone interjects a humorous comment. As in conversation generally, this can have a positive effect on the atmosphere, so it's possible to go along with it. Just be careful that it doesn't induce too many others in the audience to throw in comedy, causing a loss of focus and time. If you feel that's happening, bring the audience back to business in a friendly way, asking for further questions or comments.

## Handling Difficult Questions

What's the best way to handle difficult questions? Prepare well. Anticipate questions by thinking about it yourself ("What are people likely to ask about?") and ask your colleagues once they have read your presentation script or heard you rehearse your presentation. Once you've got that you can begin preparing your answers:

1) get extra research (but don't go too far off your topic)

2) prepare answers (and get them checked by a native speaker)

3) prepare slides, placed at the end of your presentation if they will help you answer

Inexperienced researchers often assume that they must answer every question—again, because they think it's an exam. But you don't need to. Sometimes, the question is bad, unrelated, or it's not a question at all, just a comment. What you need to do first is have the confidence and knowledge to decide whether the question (if it really is a question) needs to be answered or not, and if not, have the language to **politely** not answer the question (see the vocabulary help below).

Here's something to keep in mind as you prepare. Question time is often brief but very important for you in order to get useful feedback. So, don't waste that time—and cause stress for yourself— by answering questions unnecessarily. Always be honest, and...

## a. If it's not a question, don't try to answer it.

Audience members often make comments that do not actually require an answer. It may be enough to just to say "That's useful/interesting" and thank them. You can add more if you like, but you don't have to.

## **b.** If it's an unrelated question, don't try to answer it.

Those kinds of questions are quite common and very wasteful of your time. Be polite, but if it's not something that relates to what you're researching, then tell them. Apart from wasting time, trying to answer by guessing is likely just to create more problems for you.

## c. If you don't understand the question, don't try to answer it.

#### There are 3 likely scenarios:

i). The questioner is not speaking loudly enough. If so, ask them to speak a little louder, or adjust their proximity to a microphone.

**ii).** There is a language problem. This may be because of your listening skills with the language, but it could also be due to the questioner's weakness in speaking, or a combination of these two. Ask politely for repetition. If that fails ask the person to write it down (and move to another question while they do so), or offer to talk about it later. Try not to lose too much time trying to resolve the problem immediately.

**iii).** You understand the words, but don't get the meaning. If you're confident you might understand, try paraphrasing the question, putting it in other, simpler words, to see if you do understand ("So what you're saying is..."). If you're not confident, be honest about not understanding and invite the questioner to try again. If that fails, go to the "It might be best for us to discuss this after" option.

### d. If you don't know the answer, don't try to answer it.

Maybe you understand the question and it's a good, relevant question. This might be a nightmare for you. But remember it's not an exam. Be honest. If you say "Sorry, I don't know" no one is going to send you to prison. The worst outcome is likely to be embarrassment. But learn from it, and let the audience know you'll try to find out. And feel free to ask the questioner or the audience as a whole if they have an answer. Again, question time, like research itself, is often about cooperation, so you don't necessarily need to be embarrassed if you can't answer.

Above all, question time is YOUR time, and it's valuable for getting feedback and ideas. Don't waste that opportunity by thinking of it as a test and becoming negative. Relax and make question time, and the audience, work for you.



## **Useful Basic Question Time Phrases**

#### Inviting questions

Does anyone have any questions or comments?

Are there any questions or comments?

I'd be happy to respond to any questions or comments you might have.

I think that's about it. I'd like to thank you all for coming today. Do you have any questions?

I think we have a few minutes for questions or questions.

Do you have any questions or comments/suggestions?

#### Initial response to a useful question

Thank you for your question.

I'm glad you asked me that.

That's an excellent question.

That's a very good point

#### **Delaying your response**

Let's talk together about that later. Let me talk to you individually after the session. Let me get back to you later about that. I have some good information about that. Let me send it to you later. I'll be getting to that in just a moment.

#### When you have no idea of an answer

That's not something I've been dealing with in my research (but perhaps I should).

I'm sorry, but I'm not sure...

I'm afraid I just don't know the answer

I don't know, but it's a good point and I'll check it and answer you later

#### Didn't hear the question

Sorry. Could you say that again? Sorry. I couldn't hear you very well.

#### Not sure of the question's meaning

Sorry. I'm not sure if I understand your question. Sorry. I don't quite understand your question. Let me make sure I understand. You mean...? (or "You're saying...") \* Repeating or paraphrasing the question is a good way to make sure you understand.

If necessary, clarify at the beginning of the presentation <u>when</u> questions should be asked. You can say at the beginning of the presentation, "I'll be happy to answer questions at the <u>end</u> of the presentation." This will preempt interruptions and help you stay focused.

## Phrases for Poor Questions, and So On

## The questioner is asking something you already explained...

- > Perhaps I wasn't clear enough in my presentation. (Then repeat the information.)
- > As I mentioned earlier...

## If the question is irrelevant, you <u>don't</u> need to answer it...

- That's an interesting question, but...
- You've raised a good point, but...
- > That's really outside my area of expertise.
- > That's outside the scope of our research.
- > That's not something we've been thinking about.
- > I think you've missed my point. [S could be rude]
- Our research has been limited to...
- \* You can then lead discussion back to your own research: "What we're trying to do is..."

### If it's not a <u>real</u> question...

The audience member may begin with...

"Have you thought about....?" / "What about..." / "I'm surprised you didn't mention..." Be careful. This looks and sounds like a question, but it may not be expecting you to give an answer. So you may not need to answer. You can try these responses:

- Thank you for your suggestion.
- That's an interesting point.
- > We may look at that in the future.

### Long, long, long, long questions

If the questioner is "eating up" a lot of question time with a long question, you can politely interrupt them. Try these:

- I'm sorry, I'm not sure what your question is exactly.
- Sorry, did you have a question, or are you just making a comment?

#### **Questions for the audience**

Someone asks you a question, but you feel like they may already have an answer. In that case, you can actually say to them:

- "What do YOU think?"
- "Do you have some thoughts on that yourself?"

#### Be careful. They may think you're asking this to avoid answering. If that's the case, say:

- "I've been wondering about that myself. What do YOU think?"
- "I have my own answer, but firstly, I wonder what YOU think?"

You can ask for information, research references:

"Do you have any recommendations?"

If you have a problem with your research, this is the time to ask directly...

"Do you have any ideas as to how we can solve this problem?"

## **Responses to Direct Negative Comments**

It's best to avoid arguing, but you don't have to agree with every suggestion you hear.

### **Positive response**

- That's a good point.
- I see your point.
- Thanks for your suggestion.
- I understand what you're saying.

## Already know it

- That's something we've considered.
- We wondered about that too.
- That's not something we've found in our study.

## Accept need for improvement

- That's a good point, but...
- I need to consider that some more.
- We need to do more on that.
- Can we talk about this after?

### Agree... but... then disagree

- You have a point, but (however) ...
- I see your point, but...
- I understand what you're saying, but ..
- Perhaps, but...
- Maybe, but...
- That might be true, but we need to consider...

### Partly agree... but... then disagree

- That's true to some extent, but...
- I agree with you up to a point, but...
- I agree with some of what you say, but....
- That's true, but it's not the full story/picture. ...
- That's true in certain respects, but...

## **Q&A Audience Expressions**

Being an audience member at an academic conference can be very enjoyable, but it's not simply rest time, like watching TV. Do your best to make a positive contribution to the work of other researchers, just as you want them to help you.

## Compliments

Thank you for your interesting/thought provoking/fascinating presentation.I found your presentation fascinating.I enjoyed your presentation (very much).I think you are doing important/original work.

## **Didn't Understand**

I'm afraid I didn't quite catch/understand what you said about...Let me see if I understand correctly. You're saying.... Is that right?I wonder if you could clarify what you were saying about...I wonder if you could give me a (concrete) example of...

## **For more Information**

Could you elaborate on your point about... I wonder if you could address the issue of... What do you think about...? [But make sure it's sufficiently related!]

## **Implications & Applications**

What do you think are the implications/applications/benefits of your work? How do you think your ideas can be applied/used?

## **A Suggestion**

Have you thought about / considered...? Are you familiar with the work of...? I can recommend... (research / researcher)

## Doubting

I'm not sure about... I'm not sure I can agree with... Are you sure that...? Don't you think that...?

## Later Discussion

Would you be able to provide me later with details on/about...? I wonder if I could talk with you later about...? Presenting Online

## **Improving Online Presentation Quality**

#### ... without spending money

Presenting online, by which I mean here you sitting in front of a personal computer and presenting through an application such as Zoom or Teams, has become more common and we are still searching for the best ways to do this. Actually, much remains the same, but there are things you can do to improve your effectiveness online.

## Lighting

Try to achieve a light that emphasizes your face without being too bright. Most camerasadjust automatically, so you will probably need to experiment with your room lighting and naturallight (through windows) to find just the right balance to suit your camera's automatic sensors.

<u>Avoid a strong back-light</u>, such as a window behind you, because this this will make your face dark. That makes you seem distant and is not good for connecting with the audience. Aslightly stronger light in front of you tends to work best, so it may be useful to have yourcomputer screen in front of a window, so you can get natural sunlight on your face. Blinds (or even curtains sometimes) will allow you to adjust the light direction and level.

Remember that you do receive some light on your face from your screen, but this can vary depending on the size of the screen, your brightness settings, and what colors are being projected through the screen.

If you're bald, don't have a light directly above your head. (I know!)

### Background

It's OK to have your real room in the background. Just make sure there are no distracting elements and keep the light lower there than the light on your face.

## **Camera height**

Try to have the camera as close to possible as your <u>eye-level</u>. If you are looking up or down it creates a slightly strange atmosphere that is not so natural or comfortable for communication.

Try to have your eyes at about 1/3 (of screen height) from the top of the screen.



Armineaghayan

## **Camera distance**

Try to have your face not too big and not too small on the screen. Your face should be about 1/2 to 3/4 of the screen height. This can vary depending on what you want to achieve. Of course, closer will make a more intimate relationship. But if you want to gesture, it may be better to have a little more distance. So consider what suits you, theaudience and your aims.

## Eye contact

Eye contact is no less important in an online presentation than in a face-to-face situation. It can take some time to get used to, but try to look at the camera as much as possible. To help you do that, you can attach some image or colorful reminder to the camera to keep your attention there, and/or place the thumbnail images of your audience near the camera if you can without obscuring your slides.

### Sound

Make sure you are getting the best possible sound from your microphone. Somecomputer microphones are not good. Smartphone microphones are usually quite good.

Headphones or earphones may be best. Speakers can cause a problem with "echo" as the microphone picks up the speaker sound as well as your voice directly.

### Font and image size

Because people tend to sit quite close to their screens, it may be best to reduce the size of some of the font on your slides compared to how you would have them for a "live" presentation. Don't overdo it though... some people may be using smaller tablet or even smartphone screens.

## **Understand "Online fatigue"**

It has been reported from various sources that people become tired more quickly while interacting online. One reason for this is that we have to work a little harder to understand someone onscreen. We can't see them so well; we may not be able to see their body language; and it's just not so real, so it's easier for us to become bored, as if we're watching TV. All in all, making a personal connection can be a challenge.

So, what should you do? You have to work a little harder to engage the audience. Don't "perform—be your natural self as much as possible— but raise your energy level.

Engage more: increase interaction through questions and other ways of inviting participation from your audience. And play a little: this raises the energy level, interest and engagement.



Sanskar Dahal, CC BY-SA 4.0 via Wikimedia Commons

# **Poster Presentations**

## **Understanding Poster Presentations**

## What is a Poster Presentation?

Many academic or research conferences these days include what are called "Poster Sessions." The format may vary, but they basically entail researchers making a poster containing key elements of their research. These posters are displayed in a large room or hall, with the presenter usually standing with their poster. Conference attendees typically wander around the space searching for something that is relevant to their own research or interests. When they find something that looks interesting to them, they may stop, explore the content, and possibly talk with poster presenter, asking questions or making comments. The speaker may have a little speech they make (not more than a few minutes) but the atmosphere is less formal.



Mines CERSE, CC BY 2 ,via Wikimedia Commons

## Why Do Conferences Have Poster Sessions?

Poster sessions allow organizers to have a lot of presentations quite efficiently, increasing the amount of information exchanged within the limited time of the conference. Because they involve conversation in pairs or small groups, they allow deep discussions that may be especially productive for all involved. Along with that, they are also effective for promoting closer contact and fostering relationships between researchers.

## How Do You Apply to Give a Poster Presentation?

The conference website will include information about this and, as with the conventional oral presentations, you will likely be asked to submit an abstract/proposal as part of an application to the conference.

In some cases, you may apply to give an oral presentation, and because there are limited positions for oral presenters you may be offered a poster presentation instead.



UC Davis College of Engineering, CC BY 2.0 via Wikimedia Commons

## Why Give a Poster Presentation?

Poster presentations may be considered less prestigious than oral presentations in front of a large audience, but in terms of conveying your research and gathering useful feedback they need not be regarded as inferior. In fact, in some respects they can be more suitable for your situation, your goals and even your character. Here are the main benefits of a poster.

#### A larger audience?

It is possible that you may actually reach a larger audience through a poster presentation than a conventional oral presentation. Remember that at larger conferences oral presentations are mostly conducted through "parallel sessions," which means that two, several or many presentations are given at the same time in different rooms in the conference location. For that reason, a large number of your potential audience may simply be in other rooms when you are speaking. Another issue is that it's possible (unfortunately, I know from experience) that you can be selected to give an oral presentation and have almost no one attend except for the other speakers and chairperson. It's not your fault—it's often just a matter of the timing and competing sessions—but an oral presentation is not necessarily going to guarantee an audience.

Or course, it's also true that when you are presenting with a poster many people will just walk on past, so it's not a guarantee of success either, but it can turn out to be a good way to at least give yourself a fighting chance of reaching more people.



ENERGY.GOV, Public domain, via Wikimedia Commons

#### A more diverse audience

If you do a conventional oral presentation you'll usually be allocated to a session with 1, 2 or 3 other speakers. Hopefully, the organizers will be careful to create sessions with speakers from similar or well-connected fields so that the presentations within the session have a certain theme and even continuity. But for precisely that reason it's possible that people who are a little outside your subfield but might be interested in your presentation—and could give useful input in the Q&A—won't attend. They'll be in a different session at that time. Posters are less likely to have that problem.



ENERGY.GOV, Public domain, via Wikimedia Commons

#### **Genuinely interactive**

In conventional oral presentations, your time is usually divided between the time when you are talking and the question time (Q&A). It's not a perfectly free two-way interaction. A poster gets closer the ideal as the audience, especially if it's just one or two people, can be free to ask you questions anytime, and you can ask them questions anytime. Because of the limited audience and less restricted time, you could have a deeper, more productive exchange of ideas.

#### **Closer connections**

For many people, attending a conference and even giving a presentation is as much about meeting people and forming useful, creative relationships than about the exchange of content. Poster presentations can be much better for that because they promote one-on-one interaction.

#### Less stress?

You're less likely to have a large number of people in front of you at any time during a poster presentation. So you don't need to feel that awful "performance anxiety" and nervousness.

#### **More freedom**

You'll probably be in a room with a few or many other poster presentations, but you'll control your own space, you won't have to work with a chairperson and other presenters. You'll even be able to wander off if you get fed up. If you're a free spirit or loner, this may suit you.

#### **More practice**

Here's the thing: if you do an oral presentation, you do it once... and usually make mistakes that you can't fix... but when you do a poster presentation you can practice your little speech, if you have one, over and over. This is great practice. If you're working in a second language, that can be especially useful.



Mines CERSE, CC BY 2.0, via Wikimedia Commons
### **Poster Design**

You're not a professional designer, I guess, but the fact is design has a big influence on the effectiveness of a poster presentation. So, make your decisions carefully. Make a poster you will feel good about standing in front of.

Be aware that people visiting a poster presentation session have to make quick decisions about which posters to "visit," which to ignore. The content is most important, but the design helps to make that content attractive, clear and accessible to them.

Give yourself plenty of time to complete the design, receive feedback, have the language and data checked, and get it printed well before your departure for the conference.

I'm providing plenty of concrete suggestions below, but keep in mind that poster design is evolving. For scientific fields, they still usually follow the IMRaD format loosely working through the sections from top to bottom, left to right. Anyway, conferences usually set guidelines for your poster, and these may be very detailed and specific. If they're not, then you may want to try something a little innovative and creative to attract attention, communicate well, and even to give yourself pleasure in creating.



Jayblock93: CC BY 4.0 Creative Commons

### General

- Think of your aim.
- Think of your audience: what do they want?
- > Focus on the central message, the really new aspect of your research.
- > Create a visual flow from title through to key conclusions that suits the logical flow.
- > There is no rule, but in general, flow from top left to bottom right of the poster.
- Give the audience what they need, but simplify as much as possible.
- > Don't be afraid of white space on your poster (10-30% is recommended).

#### Text

- 1. The title should be easily read at a distance of 3 meters.
- 2. Avoid using all capital letters in your title (e.g., EFFECT OF BANANAS Effect of Bananas)
- 3. Don't make your title too long or complicated.
- 4. Use text size and color to create hierarchies of information.
- 5. Avoid including an abstract. Your poster is an abstract
- 6. Use font styles that are easy to read.
- 7. Ensure your font is large enough to be easily read at 2m: usually over 22 point for body text.
- 8. Don't use more text than necessary. Dense, text-heavy posters frighten audiences away.
- 9. Some explanatory sentences may be required, but avoid big blocks of text.
- 10. Use short paragraphs or lists as much as possible.
- 11. Don't add bullets for section headings. Bolded, larger font is enough for clarity.
- 12. The width of columns should be approximately 40 characters (on average, 11 words per line). Shorter or long lines are harder to read quickly.
- 13. In general set line spacing of text to be exactly 1.
- 14. Avoid overuse of acronyms and other abbreviated words that some may not understand.
- 15. Try to use general, descriptive terms that would make sense to your audience.
- 16. Consider using **bold** or **colored** font to emphasize key points, such as aim, main conclusions.
- 17. Avoid using *italicized* font as much as possible. It's difficult to read.

### Color

- 1. Be careful in using dark backgrounds. They make designing, and sometimes reading, difficult.
- 2. Don't use too many colors.
- 3. Ensure strong contrast between colors. Avoid using red or blue together with green.
- 4. Use color not to decorate but to clarify, such as in making subheadings or key points clear.
- 5. Don't place various colors behind one area of text.

### Images, Diagrams

- 1. Give your graphs titles or informative phrases.
- 2. Format axis labels in "sentence case". (Not in Title Case and NOT IN ALL CAPS) for faster



reading.

- 3. On graphs, use horizontal text on the vertical (Y) axis if possible... it's easier to read
- 4. Don't display two-dimensional data in 3-D. It's more difficult to process mentally.
- 5. Make sure that details on graphs and photographs can be easily viewed from 2 meters away.
- 6. Use pictures with high resolution so that it doesn't look pixelated (fuzzy) when printed.
- 7. Give the source for any image that's not yours. And be careful with copyright of images.
- 8. Don't clutter the top of your poster with logos. If you must use them, keep them small and possibly at the bottom of your poster.
- 9. If photos are not clear when printed, paste better versions over them.



Ogasawara Kanae

### ... and something extra?...

- 1. If you want to show more images, consider putting them into "booklet" form, which can be attached to the poster. (Check this is OK with organizers first.)
- 2. If you have video, consider using an iPad, which might even be attached to your poster. (Again, check with organizers, and if you have sound on video then attach headphones.)
- 3. If your topic is related to an object, attach the object to your poster if possible.
- 4. Use tape to add a transparency sheet over a graph or photograph if you want to make nonpermanent markings with marker pens while explaining something.
- 5. If you have information that only some viewers might find interesting, use a "hidden panel" approach. Just print your interesting extras onto your poster, but *cover* the area with a hinged piece of poster board onto which you have glued something else.
- 6. Have handouts (ideally in color) with full-color, miniature or simplified versions of your poster content on A4 paper to hand to people. You can also make prints with extra data if it serves your purpose.
- 7. If you have a related article or manuscript, consider preparing copies of this too.
- 8. If you have important extra material, consider putting it online. You could put a QR code on the poster for a quick online link. See the poster below.



\* From colinpurringtion.com. Thanks to Colin Purrington for many of the suggestion for posters above.

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### **Presenting Yourself**

- 1. Try to combine professionalism with your warm, relaxed, natural self.
- 2. Don't rush to talk to a guest arriving at your poster. Give them a chance to look and read for a while first.
- 3. Don't refer to notes when explaining your poster.
- 4. Speak to your <u>viewers</u> as you explain your poster. That is, don't talk to your poster.
- 5. A poster visitor appreciates a 1 or 2-sentence overview of why your research is important.
- 6. If more viewers arrive halfway into your speech, finish the discussion with the earlier arrivals first.
- 7. Have on hand—but do not force people to take—manuscripts and reprints of your work.
- 8. Don't give handouts too quickly, because this may be used as an excuse to leave.
- 9. Attach a few business cards to your poster.
- 10. If you must leave your poster (toilet, etc.), attach a note saying when you'll return.
- 11. Attach your photograph near or on your poster so that people can find you more easily when you leave.
- 12. Perhaps bring a battery-powered lamp *if allowed*, in case your poster location is in a dark area.
- 13. If a person wants a photograph of your poster, be warned that he or she might post a very high-resolution version of your poster on an Internet site.
- 14. Consider matching your clothes to your poster color. Research (see Keegan and Bannister) has shown that your poster will be visited more if you match it (quoted by Purrington).
- 15. Thank your viewers for visiting. If they have stayed more than 4 minutes, you have succeeded.



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Informal Conference Interactions

### **Informal Conversation Phrases**

How do you talk to people in informal situations during a conference? Mostly, just be yourself, but here is some English language help.

#### Introductions

I don't think we've met. I'm... (My name is...) Nice to meet you... [Introducing another person] Here's someone I'd like you to meet... <u>This</u> is... [注意: DON'T use "S/he is"... it's considered impolite.]

#### Small Talk [General]

Where are you from? How long have you lived there? Have you been to...? How long is the flight/trip from... [their home] Where are you staying? Will you have time to do any sightseeing? Are you returning home straight after the conference? What ... do you recommend...? [places, restaurants...]

#### About the conference

What do you think of the conference so far?
Do you like the food? (What do you think of the catering?)
Are you giving a paper?
What's your paper on? [topic]
I'll try to attend your presentation.
If you're free at [time/day] please come to my presentation. I'd love to hear any ideas you have on the subject.
Have you met...?
Are you familiar with the work by...?

#### Leaving

There's someone I have to talk to... Sorry, I have to.... [make an excuse]. It's been nice talking with you.

I'd like to hear more about your research.

Are you free at...?

What about...?

Why don't we ...?

Nice chatting with you. Best of luck with your paper. I'll see you later.

### **Example Informal Conference Dialogue**

H: Excuse me, I don't think we've met. My name's Hiroki Matsumoto.

E: Nice to meet you. Edith Wharton. "Edith" is fine. Where are you from?

H: I'm from Nagoya University in Japan. And you?

E: I'm from the University of California at Santa Barbara. Have you been there?

H: No, I've been to California twice, and I traveled to Santa Barbara on my way to San Francisco

from LA. But I'm afraid I didn't visit the university. I liked California, though. Great weather!

E: Yes, you're right. I don't like this New York weather at all.

H: Have you ever been to Japan?

E: No, but the funny thing is I'll be making my first visit to Tokyo next spring for a conference. I'm looking forward to it.

H: Oh, I hope you like Tokyo. Will you have time to travel around Japan?

E: I'm hoping to get a week or so free. What do you recommend I do?

H: It depends what kinds of things you like? Are you interested in cultural sites? Nature? Shopping?

E: A little of everything would be nice.

H: Well, I'd suggest...

E: It sounds fantastic. I think I'm going to love it. Hiroki, are you giving a paper at the conference? H: Yes, I'm speaking on Wednesday morning.

E: What's it on?

H: I'm talking about my research on the effects of banana eating on intelligence. And you?

E: I'm scheduled for Thursday afternoon. The title's "Genetically engineering giant mangoes."

H: Sounds very interesting. I'll try to be there. Oh, here's someone I'd like you to meet. This is

Shikibu Murasaki, from Tokyo University. Shikibu, this is Edith, from the University of California.

S: Nice to meet you.

E: Yes, you too. I was just telling Hiroki I will be in Tokyo next Spring.

S: Oh, really? That's a good time to be there.

H: Excuse me, I've just seen someone I need to talk with. Edith, I hope I have a chance to talk with you later.

E: Yes, I hope so. (Hiroki leaves) So, Shikibu, are you giving a paper?

S: No, I'm not... just listening this time. What's your paper on?

E: Well, it's about...

S: Oh, it looks like the next session is beginning. There's a paper I don't want to miss. But I'd like to hear more about your research. It's kind of related to what I'm doing. I don't suppose you're free at lunchtime?

E: Yes, I'd like that. Say about 12? Where shall we meet?

S: How about right here?

- E: Fine. I'll see you then, Shikibu.
- S: I look forward to it. Bye for now.

### **Avoid Misunderstanding in English**

Keep in mind: most conversations in English are not between native English speakers.

#### Problem understanding a native speaker?

It's not always your fault! Conversation is collaboration, and sometimes it may be a native speaker who is not collaborating enough.

Native speakers sometimes don't understand other native speakers because of...

- \* accents
- \* idiomatic speech
- \* poor expression/grammar
- \* ambiguity in the language system

The native speaker, or any speaker, may not be thinking enough about the listener.

#### You can ask for clarification of just the part you don't understand.

A common problem is a speaker says "I *can/can't* attend the next session" but you're not sure whether it's "can" or "can't". In that case, use:

"Sorry, you're saying you are *able* to attend, or *not*?"

"Sorry, let me make sure I understand what you're saying." Then paraphrase...

Use: "Sorry, I didn't catch the first/middle/end part (of what you said)."

If the speaker says "I thought the presentation was *stupendous*" but you don't understand "stupendous", ask:

You thought the presentation was what, sorry?

I made a complete *mess* of my presentation. Sorry, you made a *what* of your presentation?

We went to the *Warhol Museum*. Where did you go, sorry?

I have just met **Professor Wisamitanan** from Thailand. Sorry, you met **who**?

#### **Exercise:** Try to get the missing word from these sentences by asking a question:

- ①. I plan to collaborate with  $* * \wedge \oplus$  on his banana research.
- ②. The conference paper was based on  $* * 4 \oplus$  done over 10 years ago.
- ③. I need to catch a train to go to  $* * A \otimes$  straight after the conference.
- (4). The presentation I just attended was completely  $* * \land \otimes$ .

\* Adapted from: A. Wallwork, *English for Presentations at International Conferences* (2010)

# Self-Reflection & Checklists

### **Presentation Preparation Questions**

As	you prepare, ask yourself					
1.	How much time is allotted for your presentation? minutes					
2.	How long is question time? minutes					
3.	Are the audience likely to be specialists (infielders), knowledgeable in your topic? YES / NO					
4.	What are the likely (English) language levels of your audience?					
5.	What do you think the audience will want from your presentation?					
6.	What do you want to achieve (in concrete terms) by doing this presentation?					
	① ideal:					
	② minimum:					
	3					
7.	What will be the primary message/point/ thesis of your presentation?					
	what will be the printing message/pointy thesis of your presentation.					
8.	Do you have sufficient logical/data support to deliver this message? YES / NO					
9.	What are your greatest anxieties concerning this presentation?					
10.	. Do you have a script or plan to write one? YES / NO					
11.	Will you a) read, b) use extensive notes, c) use minimal notes, or d) speak directly? (circle					
	one)					
12.	<ol><li>What kind of slide text, images, video (if any) do you expect to use?</li></ol>					
13.	. Do you have ideas about slide design?					
14.	. Do you plan to have your script/notes/slides proofread? YES / NO					
15.	How long before presentation day do you expect to complete materials?					

### Presentation Checklist 25 Useful Points

- □ Your title provides useful, understandable information.
- □ Your introduction gives enough background on the subject.
- □ Your introduction clearly states the main idea.
- □ Your key terms are clearly defined or explained
- □ Your introduction gives the audience motivation to listen (importance).
- □ Your introduction includes an outline to help the audience navigate (if helpful).
- □ Your introduction is 10-25% of your presentation.
- □ The body of the presentation provides sufficient support for your main idea.
- □ All information in the body is useful in supporting the main idea... no waste.
- □ The presentation flows smoothly, logically using transition phrases, subheading slides.
- $\Box$  Your conclusion reviews the key points.
- □ Your conclusion restates the main idea.
- □ Your conclusion restates the significant implications/applications of your idea.
- □ Your conclusion is 10-25% of your presentation.
- □ You provide references (参考) for supporting evidence, data, images.
- □ There is sufficient and clear contrast between text and background on slides.
- □ There is not too much text or imagery on slides.
- $\hfill\square$  Text and images on slides are big enough.
- □ You use animation on your slides to avoid "information overload".
- □ There are "real world" images (photos) relating to your research among your slides.
- □ You have prepared slides for question time.
- $\Box$  You have had the script/slides checked by a native speaker.
- □ You have checked and practiced pronunciation of all words, especially key words.
- □ You will be able to speak directly to the audience without referring to notes too much.
- □ You are confident your target audience will understand at least 80% of your presentation.

#### \* It's possible to not tick some of these boxes... but you should have a good reason for that. It's most important that you think about each point and make decisions carefully based on the goal of clear, successful communication.



### **Presentation Self-Assessment**

	金 sold	<b>銀</b>	銅	Comments		
Introduction						
Attention-getting?	0					
Background explanation?						
Clear idea?						
Outline?						
Importance given?						
Body Structure						
Logical flow/connections?						
Clear parts/transitions?						
Research support?						
Conclusion						
Summary/restatement?						
Memorable?						
Eyes and Face						
Contact with all members?						
Expressive range? Mobility?						
Visual Aids						
Text?						
Images / Color?						
Animation?						
Layout?						
Voice						
Clear?						
Natural Variation?						
Speed?						
Question Time						
Responded Suitably?						
Stayed Cool / Confident?						
General comments						

### Summary: Key Points to Consider...

- A presentation is not an exam!
- Consider your speaking aims.
- Consider your audience.
- **Prepare** professionally, **Don't ACT** like a professional.
- Be your natural energetic self while presenting.
- Structure your presentation around a main idea/question.
- Signpost parts and transitions.
- Make the presentation flow logically through words, visuals.
- Keep it as clear and simple as possible, even with complex content.
- Speak clearly, including pronunciation, pace.
- Question Time: it's **YOUR** time to get feedback.
- You don't need to answer bad or non-questions.
- Design visuals above all for clarity.

## • ENJOY IT!

