

Making Effective Scientific Presentations

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Introduction

You have spent months, years or even decades on your research and you believe that you have an important contribution to give to the scientific community. As well as your well planned, constructed and peer-reviewed paper, you want to give a presentation to your peers at a conference or meeting that will highlight your important contribution. This may be your one and only opportunity to have your work presented to a wider audience.

Or....

Your research stands on the abyss of funding. You want to give a presentation to potential funders, or to the College Board or Foundation. You have one shot at stability for a few years.

What's the secret to winning in both these cases? It's simple – it's you.....and some simple communication skills that anyone can master or adapt to suit their personality and style.

The only rules

There are only two fundamental rules in making effective presentations:

1. Be heard
2. Be interesting

If you can just do those two things, you are on the path to success.

This booklet will provide you with some ideas to encourage you to give a more effective presentation to your peers, potential donors or the wider public.

How do you know if you are making a great presentation?

Most people fail to give a good presentation because they really don't know how effective presentations are measured. According to some of the world's best presenters, effective presentations can be measured using the following four factors:

25%	Message
25%	Words & Images
40%	Rapport -
10%	Retention

Message – this is the purpose of the presentation. It may be to release your latest research, or to get funding. But you can't just expect your message alone will sell. Some of the best 'ideas' in the world have not worked because the presenter thought that

relying on the great idea was enough. “The idea is so good it will sell itself”... does not work! Having a strong, simple message makes for a strong effective presentation.

Words and Images – how you deliver your message is as important as the message itself in making an effective presentation. This is about what you say and how you use visuals. Most scientific presentations fail right here. They don’t realize that most people, including the world experts, don’t want to be blasted with five syllable jargon, acronyms and complex charts and graphs. This is probably the one area in which we all need to concentrate to really make an effective presentation.

Rapport – the most important factor in measuring presentations is how the audience interacts with the presentation. If they just sit back and snore, then obviously the presentation was ineffective. Remember the last person you considered to give a great presentation. I bet that they have people smiling, clapping, laughing, nodding etc. They created an audience interaction that did not interfere with their message or words, but added strength to their presentation.

Retention – how much of the presentation do you, as a member of the audience, remember? If you leave a presentation having no idea what it was about, then the presentation was ineffective. If you leave with a good idea, some action or even some knowledge that you may never use, then you have retained some of the speaker’s message. This is a good sign that the speaker gave an effective presentation.

During your next conference, try and mark presenters using these factors and see if your score reflects what you know to have been effective presentations.

You can also use these four factors to plan and deliver your own effective presentation!

What is your message?

What is the one message, idea or fact that you want the audience to leave with? This could be one of the following:

- My research has added this important fact to the pool of knowledge.
- My research deserves more funding.
- My research is at an interesting stage and will continue.
- I am looking for collaborators for my work.

..and so on.

Having one message will enable you to focus on all the other things you have to prepare. Sometimes good presenters have two messages...but rarely more than two. Multiple messages make the audience lose focus and all the messages are lost. My strong advice...have ONLY ONE!



We all know what Uncle Sam's message was – I WANT YOU!

Spend time on preparing your message and write it down. It may end up being the title of your talk, but most times it does not. More often it is a subtler message that you dress up with all the words and images.

One way of developing your message is to use a simple formula like:

The purpose of my presentation is to (educate, influence, persuade etc.) my (peers, board, foundation, members etc) that (the real message)

Examples could be:

The purpose of my presentation is to educate my peers that the research I am doing is adding value to the debate about the K-T boundary.

The purpose of my presentation is to influence the Pertwee Foundation that providing funding for my research into climate change using foram data is a valuable use of their money.

The purpose of my presentation is to persuade my college board that the new laboratory facilities need to include a dedicated space for a new XRF if we are going to raise external funding from companies.

Spending time on your message is very valuable as it provides a focus for the rest of your presentation.

How do you deliver the words and images?

What are the words?

Writing a presentation is nothing like writing a scientific paper! It requires a set of different words, expressions and grammar. It is not something you read out loud. It is something you speak about from the heart.

When you write a presentation you need to keep the following points in mind:

How long do I have? – good presenters work on around 150 words a minute as a rate of delivery. This means that a 20-minute oral is about 3,000 words. That is not very many words, so you will have to make each and every one count.

Plan to have only three quarters of the total time to give your presentation. That way you know you don't have to rush to get it all said, it will leave time for questions, and you can then ad lib a little, if that is your style.

Who is my audience? – if you are speaking to peers who are well versed in all the jargon of the topic about which you are speaking, then you will not need to greatly modify your language. However, in my experience, this is rare. Most of the time you will be giving a presentation to a broader audience and you will have to considerably modify what you say. My golden rule here is to not use jargon at all and NEVER use acronyms (unless you are prepared to explain each and every one). Get a good scientific dictionary and use it to help you explain your science in a simpler language. The shorter the word you can use the better.

When you are finished, run it through the 'grandma test'. If your grandmother can't understand the words you are using then neither will some of the audience.

Another neat measure is the Fog Index. This is a simple way to measure the style of the writing. Just give one point for each word in a sentence. Add an additional point for any word that has three or more syllables. Find the average sentence score for around 10 sentences and this score is the Fog Index.

The Fog Index of the opening paragraph in this booklet is 29. The lead article on the front page of the city newspaper the day I wrote this section had a Fog Index of 25. Most scientific papers have Fog indexes of 40 or more.

Writing the actual text

Now that you know how many words you need and the audience you need to pitch it to, you can start writing the text. A good way to start this process is to define, from your message statement, around three major sub-points that you want to get across.

For example, if we use the following message:

The purpose of my presentation is to educate my peers that the research I am doing at Cow Flat is adding value to the debate about the emplacement of Cu-Pb deposits in NSW.

The sub-points could be:

- 1. The current issue of debate of these deposits – timing and source fluids.*
- 2. The reason Cow Flat is a good example of these deposits*
- 3. The fluid inclusion anomaly I discovered at Cow Flat.*

Then using these three sub points, write a couple of sentences outlining the points, for example for sub-point 2;

Cow Flat is a series of Cu-Pb deposits in central NSW which lie along the same mineralized belt as Sunny Corner, Wisemans Creek and Trunky Creek. The deposits are all similar in size to those cited by Jones and others in this debate. The Cow Flat deposits had not had any fluid inclusion research done until my work.

And then finally for each point, add some examples:

In comparison, the Wisemans Creek deposits all lie in the same Vales Creek Formation as the Cow Flat deposits. The Wisemans Creek deposits are around 10,000 tons low grade copper and lead. The Cow flat deposits average 12,000 tons with one being considered as high grade.

Wisemans Creeks fluid inclusion study was done by Shold Consulting in 1984. They found that the fluid composition and pressures were consistent with those found in all the other studied deposits in the region.

When you have done this for each sub-point, you will have the base of your presentation completed.

Notice the simple formula:

Sub-point 1
 Sub-point Text
 Example
Sub-point 2
 Sub-point Text
 Example

Sub-point 3
Sub-point Text
Example

Simple it is, and yet powerful (according to Yoda and other great presenters!)

Now you have to go and write an introduction and a conclusion based on your sub-points. If you have written sub-points that meet your message, then your introduction should also reflect your message.

The Introduction

This is where the *Message, Words and Images* and *Rapport* all come together. You need in your introduction to capture the audience and get across your message using good words and/or images.

You can prepare the Words and Images ahead of time. However, great speakers watch the audience before they start and then calculate if they need to start right into their words or if they need to recapture the audience with some small hook. If you start with an audience not on your side, you will find it difficult to win them back. We will look at techniques to get the audience on your side later.

One thing to remember here is to be mindful of your message and sub-points, but keep them to yourself. Don't make them your introduction and don't ever make it your first slide.

An exception to this is when you are giving a more structured presentation that may last many hours or days and is broken up with other speakers and or activities. Then this becomes a housekeeping activity that you start the day off with, but it really is not an introduction.

Your introduction words should be punchy and really state your message (but not using the same words we wrote the message down with). So, if the message is:

The purpose of my presentation is to educate my peers that the research I am doing at Cow Flat is adding value to the debate about the emplacement of Cu-Pb deposits in NSW.

The introduction could be:

The debate about the emplacement of Cu-Pb deposits in NSW has been raging since Roal and Jans published their paper on Sunny Corner in 1963. Many studies have followed which have added weight on both sides. But all of these studies have been based on those original sites. Its time a new site with new data was added to the discussion. Cow Flat is such a site.

Notice that I tried to use as simple language as I could. For example, I used ‘many’ and not ‘numerous’, and tried to keep the sentences short. The Fog Index of this text is 14 – which is about the level I like it.

Many books and presentation trainers suggest that you should start your presentation with an outline for the audience to follow. “I am going to talk about x, y and z”. I think that does three things: First it bites into your valuable presentation time; second, it removes some flexibility for you to respond to the audience; and third, it can turn off people who were expecting more. My advice is to avoid ever telling your audience your plan for your talk. I find it’s the sign of an inexperienced effective presenter.

Unfortunately I have heard the same person use this technique for many years, so it seems that even the most experienced speaker can be inexperienced at being an effective presenter.

The Conclusion

If you have managed to capture the audience with all you have said up until now, then this is going to be the icing on the cake. If you have lost them, then here is an opportunity to capture a little of their attention and drive home your message. For some of the audience, it’s going to be these last few sentences that they will retain.

Some of the world’s most famous presenters and speakers actually write their conclusion first. This is certainly true of politicians. Winston Churchill did it, and so did John F Kennedy. The point is that they recognized that it’s the bit that most people will remember and they wanted to leave a lasting impression.

If you have written a great introduction, then writing a great conclusion should not be difficult. All it will require is swapping around the words so that the final words are the ones with punch.

If we use the introduction above:

The debate about the emplacement of Cu-Pb deposits in NSW has been raging since Roal and Jans published their paper on Sunny Corner in 1963. Many studies have followed which have added weight on both sides. But all of these studies have been based on those original sites. Its time a new site with new data was added to the discussion. Cow Flat is such a site.

A conclusion might be:

There is no doubt that the debate about these types of deposits will continue. While we can get comfort from the data obtained from past studies, I am confident that new study areas will add clarity to the discussions. I hope that this study of Cow Flat adds some of that clarity.

We now check this against the original message to make sure that we are finishing our presentation on the right track. If it's a little off, we adjust it so it fits.

It is also worth doing a Fog Index check as well. If you have written at the right level it should be below 25. As a matter of interest, the example paragraphs above using the Cow Flat example have a Fog index of around 18. If your Fog Index is way over 25, you may need to cut sentences in half and simplify some of the words. You can do it without compromising your science. Doing it will make your presentation infinitely more effective!

Now all the words are written – the introduction, sub-points and conclusion. It's now time to focus on the visuals.

What are the images?

The biggest mistake you can make, and the one that will kill off all your preparation, is to use your visual aids as your shield from the audience. And yet I see it all the time. I bet most of you have seen the person who reads off the slides? It's a sign of an ineffective presentation and most of the audience will be asleep.

Images are there to enhance your sub-points in your message. They are not there to make the presentation. They are not there to win the audience. They are not there to fill in the gap for lousy facts or figures, or in our case, for lousy science.

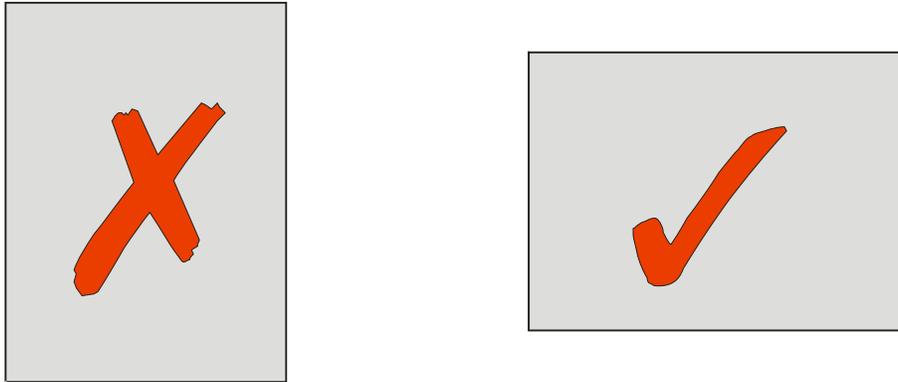
To use images effectively in your presentation you need to remember that the images add impact only when you already have a good message to sell. All effective presenters can give great presentations when they use NO visual aids! Think about this. If you turn up to give your presentation and the computer does not work, or the file does not load, or the bulb is blown or the screen is jammed, or the room is too light...can you still be effective? The answer is always YES!

So if you are relying on your images alone, then you will not be giving an effective presentation.

With that said, the power of good images cannot be overstated. Conversely, bad images can destroy a well-planned presentation.

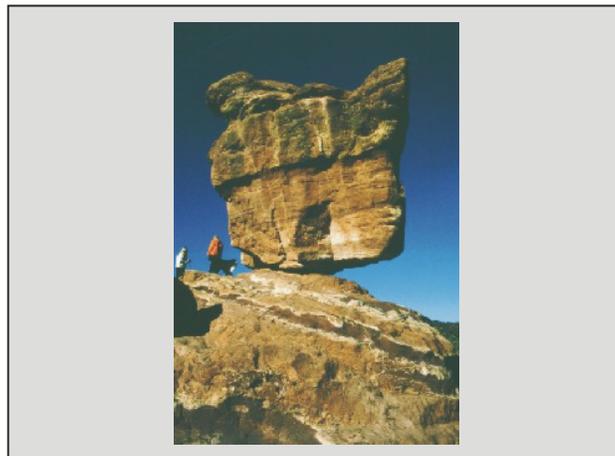
While there are as many ideas on what works when it comes to visuals for presentations as there are geologists, there are some simple guidelines you can follow to make sure that your images add to your presentation. These are:

Landscape not Portrait – use the landscape (horizontal format) rather than portrait (vertical) format for all your images. They are much easier to see and you will avoid the problem of things being too low or off the screen.



Landscape not portrait slide format

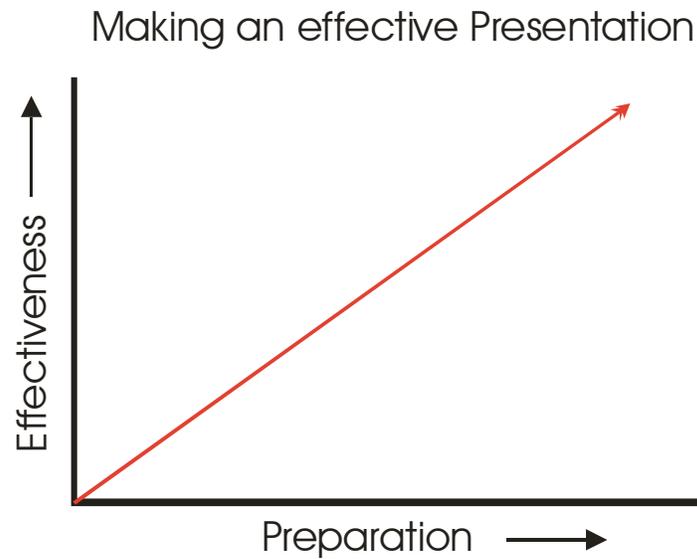
A distraction is to swap between the two. If you want to use an image that is vertical, then put it into a horizontal frame. This is easy to do in PowerPoint and other such programs.



A portrait image inserted into a landscape frame

Titles – put all your titles at the top, and be consistent with all the other graphic elements. Don't have the words in different places on different slides. This is distracting.

Make it Obvious – if the image is not obvious don't use it. If you have to explain the image, use a pointer, etc., it may not be an appropriate one to use. If it is a graph from your latest scientific paper, redraw it to make it simple to see. DON'T reproduce a page from your latest written works. Nothing kills a good presentation faster than a screen full of text and graphics.



Simple, but obvious.

Color options – Be aware of the colorblind people out in the audience. Avoid different shades of one color or red and green together. Use dark backgrounds and light lettering or the reverse. Just make sure that the difference is great enough so that the text stands out. However, don't try to use the most contrasting colors, such as bright yellow on dark purple. These are just too intense and can strain the eyes of your audience. Tone the yellow or purple down to a pastel shade.

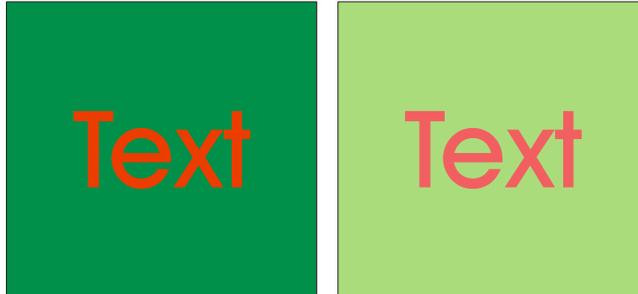
One good way to test colors is to project a few options up and ask a friend to have a look. Actually project them, don't do it from your monitor, as the colors will be considerably different.

Text amount and size – text should be big. At least 18 point. Use no more than six lines containing no more than six words. Pick one or two fonts and sizes only.

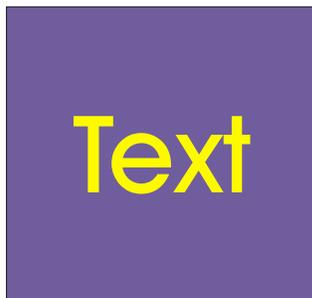
The amount of text on one slide should be able to fit on a bumper sticker or a T-shirt.

Some color don'ts

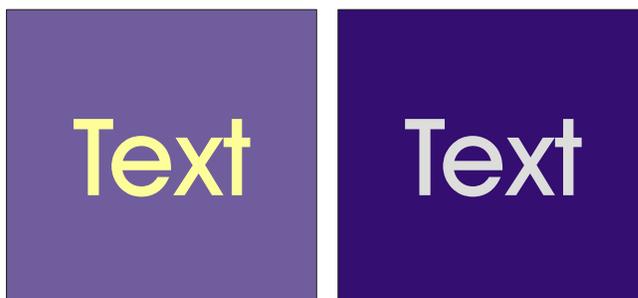
Avoid red on green (or green on red)



Avoid highly contrasting colors

**Some color dos!**

Pick a contrast between a pastel color and a darker background.



Animation – use animation only when it adds to the words and use it sparingly. Unfortunately computer presentation software has been put into the hands of people who seem to have to animate just about everything. It's like when people first got zoom lenses on movie cameras – all we ever saw was zooming in and out during every scene. This looks amateurish, as does the use of 'over animation'

I once saw a presentation where every element of the slides was animated. They had words flying in from the left, right top and bottom, images fading, rotating and spiralling in and then, to top it all, each action was matched by a loud (and different) sound. The message I got at the end was that the presenter had a new computer program, and nothing about his science!

If you must use animation, pick one style and use it. Use the animation to reveal points as you want them to be reinforced. Know the order they will appear and don't keep looking up at the screen to see if they have worked.

And NEVER use sound!

Turn it off – if you use a projector for only part of the presentation, and this is very true of the older overhead projectors, turn it off when it is not being used. The bright light with no image is distracting to the audience.

There are others who can provide you with more information about what works and what does not from a graphic design perspective. However, if you ever hear someone use the following words, you know that they have used the wrong images:

"I apologize for the focus on this one" - they should not have used this image.

"there is no need to read all the text..." - they should have summarized the points into a simple text slide

"the only thing to worry about on this graph is this line" - the graph should have been redrawn just to show the relevant line of data.

Finally, count the number of images you want to use. Work on using an image a minute. In a twenty-minute presentation you should not have any more than 20 images. If you do, then you have to discard some. And remember, if you are using slides make sure they are the right way up and not back to front.

I have seen presentations where the images are flashed up so fast that you don't have time to even absorb the content or even work out the logical sequence. Each image needs to be earth shattering and to the point of your message.

However, I have seen a great technique used occasionally where a sequence of images have been flashed up quickly to show the change of a site, in this case the retreat of a

glacier, over time. It was effective and captured the audience. You could not use this technique more than once in any presentation.

Remember, if the image is not earth-shattering and if it does not reinforce your sub-point or message – then DON'T USE IT!

Delivery time...

Nothing will replace practice when it comes to delivery. After spending time preparing the text and the images, practice, practice and practice. It will make you more relaxed about your presentation and therefore help you to give a more effective presentation.

Remember, you do not want to read your presentation. You want to be able to give your talk from your heart (or more to the point from memory). If you really want to make a big impression, put aside the time to do this. All effective presenters do!

However, before you start to practice, here are some additional points you should consider:

Voice and Microphones

A presentation given by someone with a monotone voice is dead boring. Most great presenters animate their voices. Listen to a newsreader, or even better, try to speak like them. You will notice how their voices modulate with each sentence. They get this sing-song voice going to make their presentation more interesting. And it works.

Work out what words in your presentation you would really like to emphasize. Say these words with a little more strength. If you have a point to make using only a few words, try saying them a little slower than you normally would. Use a pause after you say something profound. Repeat the profound statement again to add more emphasis...but only if the statement is short (less than 10 words). All these things are voice animation and can be quite powerful at getting your message across.

Be careful though, as too much animation will make you seem like a cartoon character! Just a little is best. Most people will not even know you are doing it and it will add that other dimension to your presentation.

If you are giving a presentation in a larger room and there is the option of a microphone, always take it! Using a microphone allows you to speak with more animation in your voice and yet without you having to strain. However, always try it out first. If it's a radio microphone that clips on, then make sure that you don't get fade-out when you turn your head. The trick with microphones is not to have them too close to your mouth, otherwise every 'P' will sound like an explosion. And the sound of your breathing may be nice to some people, but not to most of your audience.

Eye contact

Maintain eye contact with your audience. You don't have to look at each and every person, but try to look people in the eye for as much as your talk as you can. Don't look at the floor, the roof or some spot on a wall. You want to capture the audience and nothing does it better than eye to eye contact.

I sometimes use this to an extreme, especially if the audience is a little offside - looking at people can make them focus on what you say. Sometimes I will even wink at a person I know as I pause in my talk. If they wink back, it shows me they are at least following me. It also builds a little rapport.

Ahs and ums

Nerves do funny things to people when they talk. One of the most common things is to insist on inserting a small sound when they are thinking. "ah", "er", "um" are the most common. Everybody does it. You can teach yourself not to, but only through practice. It's a worthwhile skill to master, but not critical for most presentations.

More annoying is the habit when someone uses a phrase other than an "er" or and "um". Ones I have heard include:

"with me?" "you see..." "right then..." "you know?" "Yep, now"

I was once at a presentation when the person said their little phrase so many times that at the end some people (students) in the audience actually started saying it along with him. It was embarrassing for the presenter and rude of the students. But it made the point. We all remembered the phrase ("Yep, now") but not the guy's message.

One technique I have seen used by people is to bite their lip when they pause. This stops you from saying anything. But for some people, they will end up with a sore lip.

Have some water

Another nerves related problem is dry mouth. This happens to me all the time, especially at the very start of a presentation. I always have water with me. I never assume it will be provided.

Don't hide behind the lectern – don't run around the room

Some people like to give presentations from a lectern. For some it's because they like to have their notes in front of them for reference. For others it's because they have their computer slides in front of them. But for most it's a place to hide behind.

I have seen presenters stand rigidly behind the lectern and some even bend over a little; consequently the audience can only see the top of the presenter's head. In this position there can be no eye contact and no audience capture. These presenters are never effective.

My advice is to not stand behind a lectern. Find a well lit spot close by and stand where the audience can really see you. Being close by to the lectern will allow you to see notes and your laptop, and the added movement will add some visual cues for the audience.

On the other end of the spectrum are the presenters that never stand in one place long enough for anyone to focus on them. This can be very distracting.

I admit that I tend to fall closer to the room jogger than the lectern statue. I have to remind myself each time about what I am there for – to get my message across effectively, and to limit my movement. If I remember that before each presentation, I seem to do O.K.

At a recent conference session, after a couple of presenters had stood at the lectern at the front, the next presenter decided to give his presentation from half way up the lecture hall and on one side. To start with I found this annoying as I had to turn around to see him. Then I realized that more than half of his audience could now see his eyes...and he captured us all. It was a clever move on his behalf and one that really made him effective.

At a conference in the mid-1990's I saw the most ineffectual speaker grab the attention of every one in the room. He fell off the back of the stage. No one will remember his name or the title of his talk. Everyone will remember his fall from grace.

Watch what you wear and how you look

My father told me when I started working that if you dress like you mean business, you will be treated like you mean business.

My experience has shown me that my dad was right. People do treat you with more respect if you dress appropriately. It seems to be part of human nature to offer more respect to people who dress smartly to present. I find that a tie and a coat will match almost any situation and any audience, and a similar level of dress for women. A T-shirt and jeans does not seem to work in any situation – you might feel comfortable, but the audience will not consider you with much respect. Remember you are trying to capture them to hear your message, not become one of the sheep in a flock.

Fashion gurus tell me that you should never wear brown when presenting. And if you have a beard, trim it. Ladies need to tie back the hair from their faces.

There are books that can give you more information on what to wear and what not to wear when giving presentations to the media, etc. If you are in this situation, get this advice, because you can make a bad impression just by the color and pattern of your clothes, especially on TV.

How do I build rapport with the audience?

This is probably the most difficult thing for the majority of people to do, no matter what field they come from. And yet it is the largest factor to ensure that you give an effective presentation. It is also possible to achieve for even the most introverted person.

Building rapport with your audience is like being the captain of a ship. You want to take the audience on your trip, so you need to lead the way. The first three things you need to do are:

- Be confident
- Be humble and
- Be enthusiastic or passionate

Be confident

You are the expert for your own work. Be confident when talking about it. Even if you are presenting to world experts, none of them are experts for your contribution. Only you are!

Be humble

Your contribution is an important cog in the scientific wheel. However, treat it only as the cog and not the entire wheel, even if you know it's the most important cog. Being humble prepares you for any criticism that might come your way. It seems to be the less humble you are, the more people will want to criticize, no matter how good your material is.

Being humble does not mean being apologetic. Don't apologize for your work or your assumptions. However, being upfront with your assumptions can be important!

Be enthusiastic and passionate

Be enthusiastic and passionate about your contribution. While standing up in front of a group of people may be your worst nightmare, try to present in an enthusiastic way.

I once met a scientist who was a world leader in his field. Unfortunately he was forever denigrating his own science and the work of geoscientists in general. This was his way of coping with the fear of presenting his work. He was so negative that his peers never wanted to hear him present, even though he had much to offer. His own negative attitude was his own worst enemy. He had trouble getting funding, trouble getting a job and I must admit, trouble in his personal life as well.

On the other hand, I know a number of people who are highly passionate and enthusiastic about their work. When they present, they let this enthusiasm and passion seep through and, for the audiences at their presentations, it is infectious. While they may not be the world leaders in their fields, they certainly have a wide base of support for the work they do.

I believe there are mantra you can follow that will help you in your working life:

1. Know what your passions are and follow them
2. Be positive about your passion
3. Tell everyone else about your passion

Obviously number three is all about presentations of some form or another.

Capturing the audience

Now you are confident, humble and enthusiastic, what can you do to make sure the audience is awake to hear you after the boring guy before me?

The first thing is not to waste your first 30 seconds. This is the time when you will most readily capture your audience and then keeping them with you is much easier. Once you have lost them, it's almost impossible, but not totally, to win them back.

So you have 30 seconds to make the capture. Now you have a choice. If the audience looks ready and eager for your nicely crafted introduction, then make a start. If they look like they need a jolt, then you may have to try something a little out of the ordinary.

I was once told a hint by a great speaker – “start with a joke and end with a story”. It's not a bad idea if you have one that is appropriate. The joke can relax your audience and therefore relax you. It does not need to be a side-splitter, but just a small line that shows the audience that you are human and relaxed (even if you don't feel relaxed yourself). This is not the time to bring out the epic joke or one that is likely to offend anyone in the audience. Maybe a small comment about the room, the lectern, etc., can work. However, the joke must be to the entire audience, not just to the convenor or person who sat in the front!

I once sat in a presentation room waiting for a guest speaker. The room was about to be repainted, and the owners of the room had painted some small squares of different colors on one wall. When the guest speaker came into the room he saw this and his opening line was “Well thank you for asking me to come and speak in the Rainbow Room”. It was clever, appropriate and started us all off on the same level.

A few other ways of opening if you need to grab some attention are :

The Over Praise: This is where you lay the praise on thick and fast. You thank everyone for coming, tell them how honored you are to have such high level people attend your talk, etc. This makes them feel important, and gets you talking and calmed down.

The Anecdote: “On the way to this conference I met a man....” These capture the attention of the audience, as long as you can make a point of it that directly relates to your message.

My Passion: “I am going to talk about this topic because I have lived and breathed it for ten years...I am passionate about it and I hope you will now see why”

The Stretch: Get the audience to stand up and stretch. This works well if they have been seated through a number of presentations. They will appreciate it, and you have woken them all up. Just remember you are doing it to capture them, not to relax them to sleep.

Participation: Audience participation is a great way to keep them hooked. Ask a person in the audience a question, or to predict something. The question has to be easy, and it has to be addressed to an individual, rather than to the entire group. Entire group questions seem to lead to either no one answering or a flurry of discussion that takes time to pull back to order. If you pick out an individual, all the others in the room will suddenly stay in focus hoping you don't ask them a question. It works every time and I use it frequently.

For most scientific presentations, when your time is short, these openers will bite into that precious time. However, if the audience is dead, then you need to wake them up to be effective. My plan is always to have something up my sleeve...normally a small joke or a statement in which I can show my enthusiasm, that I can pull out to capture the people. I don't always use it, and I change it around so I don't overuse it. Some examples are:

“Well it's just fantastic to be here at this conference and present to you all..” then start into my introduction..

“My father once told me that there was always one pain in every group, and just make sure you're not it..(if no one laughs then I say) “Am I the only one awake “...then start off..

...and I am not going to give all my best ones away!

I will admit that I have had audiences that I could not capture. One was at a conference dinner where I was asked to be the MC. No matter what I said or did, the group was too busy talking among themselves. I could not win them over. In this case, you have to just do the bare minimum and get out of their hair, lick your wounds and try to fathom what to do better next time. In most cases it will have not been you, rather the occasion or the type of event. However, scientific presentations in a lecture situation are one of the easiest places to capture the people. They are there to hear good stuff. You have a good message, so go and tell them!

Reducing the Nerves

All these things may be easier said than done. Most people they would rather die than present. But giving an effective presentation can be the key to success in so many fields, including your science. You should remember that even the most successful presenters

get nervous before they present. In my opinion, if you don't feel stage fright before a presentation then you are not alive.

With this in mind, here are some little pointers on how to reduce those presentation nerves:

1. Take a deep breath in through your nose. Hold it and then slowly let it out through your mouth. Do this three times. This gives you a burst of oxygen as well as helping to slow down your heart beat. Believe me, it works!
2. Remember how much you have prepared. You are ready to give the best presentation you can. Be confident.
3. Pick out one person in the audience and start talking to them. Then after a few minutes, pick another person. Slowly move around the room during your talk. Maintain eye contact (but remember to blink) as you do it.
4. Remember that you can't please 100% of the people 100% of the time. But you can capture most of them with your presentation.
5. Join a public speaking club and get practice. Go practice your presentation in the park, in the forest, in the shower...anywhere. Imagine that the trees are the audience. Practice not only makes perfect, it makes it easier too!

In Summary

Giving an effective scientific presentation is in the scope of all of us. All we have to do is follow the simple rules:

1. Be heard
2. Be interesting

An effective presentation can be measured by the following factors:

Message
Words & Images
Rapport
Retention

You should make sure you prepare for all four factors.

Remember to find out the length of time and the type of audience and plan your presentation around them.

A suggested outline for a presentation is:

Introduction
 Sub-point 1
 Sub-point Text
 Example
 Sub-point 2
 Sub-point Text
 Example
 Sub-point 3
 Sub-point Text
 Example
Conclusion

Remember, if the image is not earth-shattering and if it does not reinforce your sub-point or message – then DON'T USE IT!

Have a plan for how to capture your audience at the start of your presentation. Remember you don't have to use it if they are already hanging off your every word.

And most of all.....**practice, practice, practice!**

Not all of us can really enjoy giving presentations. But all of us can be effective! This is your opportunity to get your message across and cement your contribution. So, prepare, practice and relax, because you're the expert, you're passionate and you're going to be effective!

GO FOR IT!

Some useful references:

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