Convincing Scientific Presentations

With Natalie Wilkins

Day 2 - Workbook

Name:________________________
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Introduction and learning objectives</td>
</tr>
<tr>
<td></td>
<td>Assignment Q&amp;A</td>
</tr>
<tr>
<td></td>
<td>Getting ready to perform</td>
</tr>
<tr>
<td></td>
<td>BREAK</td>
</tr>
<tr>
<td></td>
<td>Getting ready to perform</td>
</tr>
<tr>
<td></td>
<td>LUNCH</td>
</tr>
<tr>
<td>PM</td>
<td>Presentation practice</td>
</tr>
<tr>
<td></td>
<td>Learning review</td>
</tr>
<tr>
<td></td>
<td>Learning action planning</td>
</tr>
<tr>
<td></td>
<td>FINISH</td>
</tr>
</tbody>
</table>
**LEARNING OBJECTIVES**

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure and prepare clear and concise content and messages required for scientific presentations</td>
<td>Preparation</td>
</tr>
<tr>
<td>Develop and design visual aids (PPT or posters) which convey key and/or complex messages in a concise manner</td>
<td>Visual Mastery</td>
</tr>
<tr>
<td>Gain practical experience on how to deliver your message whilst maintaining audience attention and engagement</td>
<td>Delivery</td>
</tr>
</tbody>
</table>
GETTING READY TO PERFORM

Problems & Fears When Presenting

In a survey carried out amongst experienced, middle and senior executives, designed to determine the things that they feared most, what you think came out as number one?

Yes, you’ve guessed it, public speaking. Death was eighth! Astonishing, but true, most of us would rather die than stand up and present!

**Think about the presentations you have made either at work or in academia.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are usually your biggest fears?</td>
<td></td>
</tr>
<tr>
<td>What problems have you had (or felt you had)?</td>
<td></td>
</tr>
<tr>
<td>What do you like about presenting?</td>
<td></td>
</tr>
<tr>
<td>What do you dislike about presenting?</td>
<td></td>
</tr>
<tr>
<td>What are the advantages of presenting really well?</td>
<td></td>
</tr>
</tbody>
</table>
Key Qualities of an Effective Presenter

Appearance

How you dress and if you are well-groomed are key factors with presenting. First impressions really count and sometimes your audience will not be able to get over them. As a minimum, you should dress to the standard of your audience and where possible exceed it.

Try to look as tidy as possible to. The worst thing you can do is give your audience a reason not to pay attention to what you are presenting. If they are trying to work out if the stain on your shirt is egg or mustard, then they’re not going to be paying attention to your breakthrough model!

Attitude

A good presenter will keep things simple. They know that the key to interest is involvement and they demonstrate this in a positive, motivational way. They don’t use the opportunity to express how clever they are or belittle others and they always make it obvious that they are accountable and take ownership.

Good Eye Contact

Keeping eye contact with your audience ensures their involvement. This doesn’t mean staring at one person until they weep with submission. It means scanning the room and engaging with individuals on a personal level. A good technique to use until you feel more confident with developing eye contact is the lighthouse technique. Here you ‘sweep’ the audience as if you are the light of a lighthouse. The added bonus of this is that you can spot who’s taken the opportunity for a nap!

Confident Manner

Simply put, you must come across as an authority on the topic you are presenting; of course everyone will suffer from nerves to a certain degree. However, a good presenter will channel their nervous energy into the presentation and use it to add enthusiasm to their voice and actions. Movement, gestures, posture should all be taken boldly and demonstrate confidence.

The best way to reduce nerves? Know your topic!
Interesting Voice

There is nothing worse than a dull, monotone voice and usually this is the best way to switch an audience off immediately. Follow the 5 P’s - Pace, pitch, power, projection and pauses.

Another point to note is not to be scared of silence. What may seem like an age to you on stage is really not that long to the audience. Some people tend to jabber on or use filler words (um, er, actually, you know etc.), if you feel this happening to you, pause and enjoy the silence…your audience will!

Knowledge

A good presenter has a good knowledge of the material delivered, but most of all they do not bluff. If you don’t know the answer, admit it, and say you will get back to them. Nobody minds this, and it sure beats them finding out you were wrong later.

Most presentations should allow for questions and answers. How you deal with this is up to you, it could be at the end or throughout the session. Don’t let questions throughout a session put you off your stride though! Just because you are knowledgeable on the topic, it doesn’t mean that you can forget to listen, if people disagree then finds points of agreement. Do not argue! Following on from this point, ensure you show respect, always be truthful and follow up any actions agreed

Enthusiasm

Enthusiasm is contagious, you must show a passion for your topic. Ensure you cover all of your objectives/key points and most of all…make it live!

Audience

A good presenter will think about their audience prior to the presentation. Consider their current knowledge and make it relevant to them. Add value to the audience and they will listen enthusiastically.

Where necessary, a good presenter deals with negativity, hecklers, disagreements and going off agenda. It can sometimes seem easier to ignore these issues. Do so at your peril. Always ensure that problems are dealt with in a relaxed, positive and upbeat way.

Where there are strong points of debate, use questioning/problem solving techniques. Put some pressure back on your audience to deal with questions. Just because you are at the front, does not mean nobody else has to think!
Presentation Style

**Posture** – Hands, arms, legs. Stand with your feet slightly apart and your weight evenly balanced. This is the anchoring position, which will help your voice projection and stop you from losing balance. You need to make sure that your hands and arms feel comfortable. It’s not a good idea to clasp or clench your hands, or put them in your pockets. Resist the temptation to put your arms behind your back; keep them above waist level, and use them naturally to emphasise the points you are making.

**Controlling mannerisms** – verbal and physical. Try to avoid nervous mannerisms such as fiddling with rings, twiddling hair or saying lots of ‘ums’ or ‘ers’.

_Demystify these tips by taking the chance to practice by standing up and spending 2 minutes to explain how long it takes you to come to work. Write down feedback you receive about the effectiveness of your posture and about your mannerisms._
Voice – speed, pace, tone, pitch, modulation. Project your voice. Speak slightly louder than you would on a one-to-one basis. Remember to vary the voice. Pausing occasionally helps the message to sink in. Pace yourself. Start slowly at the beginning of the presentation. This will help gain the audience’s attention.

Energy and enthusiasm – if you are not enthusiastic about your subject and do not put energy into your presentation, you are not likely to hold the audience’s attention.

Eye contact – Make eye contact with everyone in the room. A tip is to look round the room and dwell on each person’s eyes for 3 to 6 seconds.

Demonstrate these tips by taking the chance to practice by standing up and spending 2 minutes to explain how you spend your weekends. Write down feedback you receive about the effectiveness of your voice. Was it audible? Was the tone enthusiastic? What was the speed like? Did you pace yourself? Did you pause occasionally to let the message sink in?
**Controlling nerves** — it is normal for people to feel nervous when presenting. You can control nerves through carefully planning and practising your presentation. It helps in particular to know the beginning of the presentation well.

“The research I’ve been doing for years now joins a large body of inquiry into a quality I call presence. Presence stems from believing in and trusting yourself—your real, honest feelings, values, and abilities. That’s important, because if you don’t trust yourself, how can others trust you? Whether we are talking in front of two people or five thousand, interviewing for a job, negotiating for a raise, or pitching a business idea to potential investors, speaking up for ourselves or speaking up for someone else, we all face daunting moments that must be met with poise if we want to feel good about ourselves and make progress in our lives. Presence gives us the power to rise to these moments.”

—Amy Cuddy (from, “Presence”)

Amy Cuddy is best known for having delivered the second most Watched TED talk in history. The talk is titled, “Your Body Shapes Who You Are”—definitely worth watching if you haven’t already done so.

Cuddy wrote this book to help people of all walks of life develop a strong sense of presence—a quality that helps us:

- Command respect and inspire others
- Speak with poise and clarity
- Become genuinely likeable to others
- Develop an inner sense of confidence that helps us feel good about ourselves and make progress in our lives

**EXPAND YOUR POWER BY EXPANDING YOUR BODY**

“As scientists, the first thing we needed was a clear hypothesis. This was our thinking: if nonverbal expressions of power are so hardwired that we instinctively throw our arms up in a V when we win a race—regardless of cultural background, gender, or whether we’ve seen anyone else do it—and if William James was right that our emotions are as much a result as they are a cause of our physical expressions, then what would happen if we adopt expansive postures even when we are feeling powerless? Since we naturally expand our bodies when we feel powerful, do we also naturally feel powerful when we expand our bodies?”

Answer: YES!
Since we naturally expand our bodies when we feel powerful, we do indeed also naturally feel powerful when we expand our bodies.

This is one of many profound insights Cuddy presents about how we can use our physiology (our bodies) to increase our power and presence.

There seems to be what researchers refer to as a “bidirectional” relationship between feeling and behavior:

- when you feel powerful, you expand your body, and
- when you expand your body, you feel powerful.

Bottom line? Expanding your body language, or carrying yourself in a more expansive way can actually make you feel more powerful.

This insight isn’t just theory either. It’s been tested and proven. In one study, individuals were split into two groups.

- **Group 1 assumed “low-power” poses** which were exemplified in combination of sitting and standing positions.
  - For the sitting positions: they took up less space, clasped their hands and then rested them closer to the body.
  - For the standing positions: they stood with their legs closer together, arms closer to the body, and held their heads in a downward position.

- **Group 2 assumed “high-power” poses** which were exemplified in the same combination of sitting and standing positions as the first group.
  - For the sitting positions: they expanded their bodies as they sat down, taking up more space, and sitting in a relaxed, confident manner with their legs out and their hands clasped behind the head.
  - For the standing positions: they expanded into power poses, standing with their hands on their hips, chin tilted upwards, and their feet planted wide apart.

After just two minutes of posing in the aforementioned positions, the results of the participants in the sample study were as follows:
- **The high-power posers** showed a 19% INCREASE in testosterone, and a 25% DECREASE in cortisol.
- **The Low-power posers** showed the opposite pattern—a 10% DECREASE in testosterone and a 17% INCREASE in cortisol.

How could this be possible?—How could a simple set of 2-minute body poses contribute to such a dramatically different set of biological responses? In scientific terms, this pattern is called dual hormone hypothesis:

- High testosterone + low cortisol = High power
- Low testosterone + high cortisol = Low power

**ACTIONABLE INSIGHTS:**

- Want to experience the benefits of the high-power posers? Start doing some high-power posing of your own! If you’ve got an important but difficult (or nerve-wracking) event coming up in life, try power posing (refer to Group 2's poses) for a couple of minutes for a quick boost in presence, power, and self-confidence.
- And remember what Cuddy tells us about posing: “Taking control of your body language is not just about posing in a powerful way. It’s also about the fact that we pose in a powerless way much more often than we think—and we need to change that.”

**SMALL DEVICES CAN LEAD TO SMALL PRESENCE**

"...the smaller the device, the more we must contract our bodies to use it, and the more time we spend in these shrunken, inward postures, the more powerless we feel. Our findings uncover a cruel irony: while many of us spend hours everyday working on small mobile devices, often with the goal of increasing our productivity and efficiency, interacting with these tiny objects, even for short periods of time, might reduce assertiveness, potentially undermining our productivity and efficiency. If you must spend long stretches in front of a screen, which many of us do, be sure to choose a device carefully and configure your space to allow for the most upright and expansive posture.”
Go to the CERN food area on a busy day, and you’ll probably find 80% of people hunched over their tiny little smartphone screen.

Regardless of whether they do it while they’re sitting or standing, this hunching-over-screen habit is NOT contributing to their sense of presence.

In fact, it’s impairing their ability to expand, thus contributing to powerlessness.

It’s actually quite obvious when we think about it: hunching down at a smartphone screen produces an inward stance; when what we’re really looking for is an expansive stance.

If you’re looking to cultivate more presence, power, and a sense of genuine connectedness with other people, then stop hunching over and tapping away at your smartphone all day long. And start being more present by putting away the smartphone, straightening out your posture, and expanding your stance a little more often.

**ACTIONABLE INSIGHTS:**

- If you know you’re going to be working in front of a small screen, take a few minutes to setup your workspace before you begin your work. For example: you might take a moment to make sure your computer chair is elevated just enough that you won’t be looking downward for extending periods of time—straining your neck as you look downward at the screen, typing away. (Side note: a couple of months back, I picked up a standing desk and I’m absolutely loving it!)

- Be mindful of not hunching over tiny screens for too long. If possible, unplug and expand as often as you can!

**GET EXCITED!**

“As most of us know, stage fright can feel like a paralyzing overdose of anxiety. And what do people tell us to do when we’re anxious? They tell us, with good intentions, to calm down.

As it turns out, that might just be the very worst thing they can say. You see, anxiety is what psychologists describe as a high-arousal emotion. As I’ve explained, when we’re anxious, we occupy a heightened state of psychological vigilance. We’re
hyper-alert. Our hearts race, we break out into a sweat, our cortisol may spike—all of these reactions are controlled automatically by our nervous system. And it’s virtually impossible for most people to shut off that kind of automatic arousal, to abruptly de-escalate it. Not only can we not calm it down, but when someone tells us to calm down, it also reminds us of how calm we are not, which stokes our anxiety even more."

...Cuddy then cites the work of Harvard researcher, Alison Wood Brooks, and goes on to tell us about another high-arousal emotion that’s actually not so negative at all; and is in fact, quite positive—excitement:

"Brooks predicted that we may not be able to extinguish arousal, but we should be able to change the way we interpret it. So rather than fruitlessly trying to change the arousal level of our emotional states from high to low, what if we try to change them from negative to positive? From anxiety to excitement?"

Seriously though, as it turns out, trying to “calm down” in stress-inducing situations (ex: getting ready to deliver a speech) will NOT help you minimize the nerves or the anxiety you feel because of the situation you’re in.

I repeat: telling ourselves to “calm down” doesn’t help us to calm down.

So, the actionable insight from this big idea is clear: when you’re stressed out of your mind,

- **DON’T** say: “Calm down, calm down"
- **DO** say: “I’m excited!”

You can watch Cuddy’s popular ted talk by visiting:

https://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are
PRESENTATION EVALUATION CHECKLIST

When reviewing the presentation ORGANIZATION, notice if the presenter:

- Opened in an interesting way – you grabbed attention
- Made it easy to tell what the topic was about within the rst 30 seconds to 1 minute
- Established your credibility/connection to the topic
- Previewed the upcoming points in the order they will appear
- Began with your main theme, then moved to the main parts of your content
- Moved from one point to the next smoothly (transitions)
- Had the right amount of information and organized it thematically (with some coherent pattern)
- Reviewed the main points in your closing remarks before welcoming questions
- Called the audience to action—they knew what was expected (desired) of them

When reviewing the CONTENT, notice if the presenter:

- Tailored to the specific listeners and their needs—the presentation was so unique that it would have to be revised to present to another audience.
- Used ample evidence to support ideas (ideas explained clearly)
- Used thorough, logical, and clear examples to make your point
- Tapped into common values of your audience
- Your information blended a mix of stories, concrete examples, metaphors, and vivid language

Their DELIVERY demonstrated solid:

- Eye contact: they scanned the room and made direct eye to eye contact
- Facial expression: that varied, looked comfortable, enthusiastic and friendly
  Gestures: they used hands naturally, kept arms relaxed by sides in between gestures, when gesturing, used appropriate gestures that matched words
- Body movement: their posture was strong and open, avoided pacing, shifting or fidgeting
- Presence: they seemed self-confident and interacted well with the audience
- Voice: they had a natural conversational inflection and avoided umms, likes, and aahs
YOUR PRESENTATION SKILLS ACTION PLAN

After watching your presentation recording and/or receiving feedback from colleagues identify three areas of strength that the feedback has made you more aware of, and three opportunities you have to improve.

<table>
<thead>
<tr>
<th>Areas of strength</th>
<th>Areas for improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>
Action plan around areas for improvement:

1. Identify the one speaking skill you want to improve.

2. Identify a baseline, when do you do this or not do this? (if it’s gestures are you not gesturing at all or too much? How many missed opportunities or overuse occasions?)

3. Identify a goal and be specific. Be sure this is an attainable goal. For example, “I want to use more gestures in my day to day conversation. In a 5 minute conversation I’d like to gesture 10 times”.

4. Find a time in your day (during work or the rest of the time) and plan to practice this skill in a relevant setting.

5. Discuss your efforts for change with a trusted colleague, friend, or family member.

6. Add audio/visual feedback if possible to measure your progress.

7. Continue repeating steps 4-6 until you can see improvement.

8. Set an overall timeline for your goal. Four to six weeks is reasonable for a speaking skill. If it’s a habit you’ve had for a while remember that on average it takes 21 days to start or stop a habit. Practice daily!

The steps above follow the SMART goal format (specific, measurable, actionable, relevant and time-bound goals have more success than general ones).