

42290 - Técnicas de Comunicação e Apresentações  
Aula 5  
30/10/2025

# How to prepare and deliver a compelling talk

João Borges

Departamento de Química, Universidade de Aveiro

E-mail: [joaoborges@ua.pt](mailto:joaoborges@ua.pt)



# Outline

- How to plan your presentation
- How to structure your presentation
- How to create/design your slides
- How to deliver your talk effectively
- Bibliography



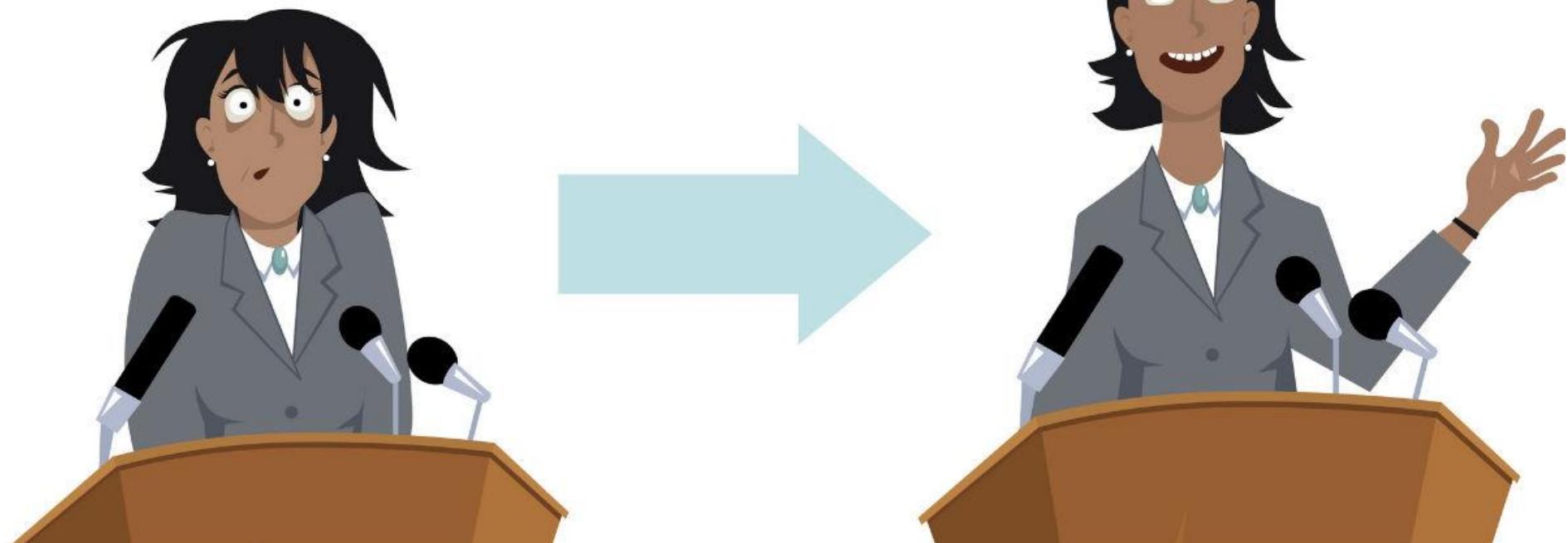
# Public speaking....getting nervous, fear, panic



Copyright © iStock/Getty Images



# How to overcome public speaking fear?



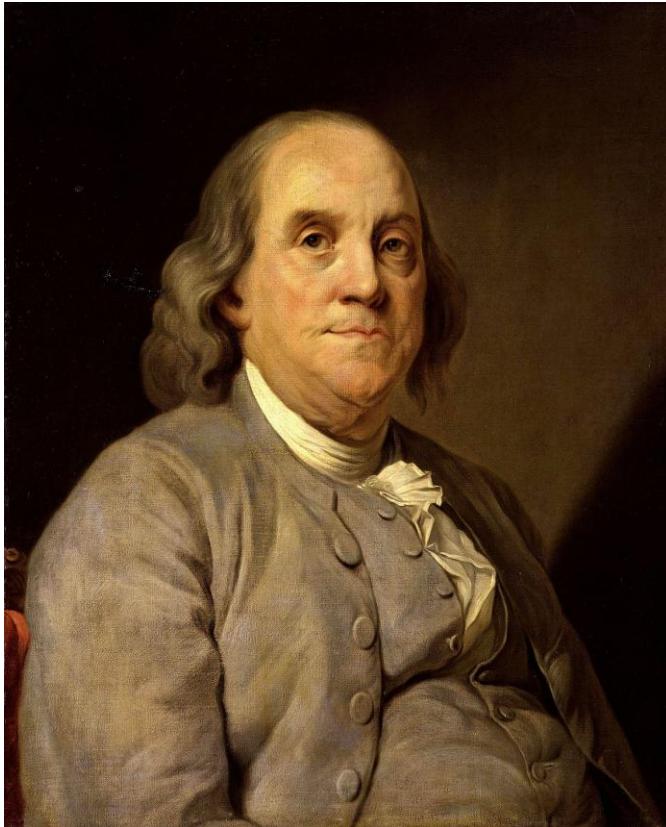
Copyright © iStock/Getty Images



# Planning your presentation...

*"If you fail to plan, you are planning to fail"*

by Benjamin Franklin (1706-1790), American scientist



[pt.wikipedia.org/wiki/Benjamin\\_Franklin](https://pt.wikipedia.org/wiki/Benjamin_Franklin)



# How to plan your presentation?



# How to plan your presentation?

## 1. WHO the talk is for?



Copyright © Shutterstock



# How to plan your presentation?

## 1. WHO the talk is for?

- Who is my audience?
- What does the audience want to know and hear about?
- How can I gauge their attention and deal with questions and feedback?



# How to plan your presentation?

## 1. WHO the talk is for?



Copyright © Getty Images/iStock photo



Copyright © NY City Children Theatre



[www2.uff.edu.br](http://www2.uff.edu.br)



# How to plan your presentation?

## 1. WHO the talk is for?



# How to plan your presentation?

## 1. WHO the talk is for? Know your audience!!!

It's not you. It's me.

Aaah...just kidding. It's  
totally you.



your  cards  
[someecards.com](http://someecards.com)



# How to plan your presentation?

## 2. WHAT will I talk about?

- What is the subject and goal of my talk?
- What type of information will best support my talk?
- What is the message/key points I want the audience to retain? What I want them to learn?
- What kind of information will appeal to the audience? What matters to them?
- What is their level of understanding about the subject?



# How to plan your presentation?

## 3. WHY will I deliver a talk?

- Why am I doing this presentation?
- Why should the audience listen to me?
- What are their expectations?



# How to plan your presentation?

## 4. WHERE will I deliver the talk?



The image shows a large-scale periodic table where each square contains a portrait of a young chemist. The table is organized into 18 columns and 10 rows. The columns are labeled with the first two letters of the element names: He, Li, Be, B, C, N, O, F, Ne, Na, Mg, Al, Si, P, S, Cl, Ar, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Os, Ru, Os, Pt, Au, Hg, Pb, Bi, Po, At, Rn, Fr, Ra, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr, Ts, Rf, Hs, Mt.

**IUPAC**

# Periodic Table of Younger Chemists

Recognized 118 younger chemists who embody the mission and core values of IUPAC

<https://iupac.org/100/pt-of-chemist/>

João Borges

Powered by Zoom

# How to plan your presentation?

## 4. WHERE will I deliver the talk?

- Where is the venue in which I will be presenting?
- Will the talk be in-person or online?
- How small or large is the venue?



# How to plan your presentation?

## 5. WHEN will I deliver the talk?



Copyright © Freepik



Copyright © Dreamstime



# How to plan your presentation?

## 5. WHEN will I deliver the talk?

- What is the *timing* of the presentation?
- How much time do I need to prepare and practice my presentation?



# How to plan your presentation?

## 6. HOW will I deliver the talk?



Copyright © Shutterstock



# How to plan your presentation?

## 6. HOW will I deliver the talk?

- How will I tell my story?
- How can I better engage the audience?
- How can I use visual aids to complement my talk, create impact and help to pass the message across?



# How to structure your presentation?

1. Introduction
2. Body
3. Conclusion



# How to structure your presentation?

1. INTRODUCTION

2. Body

3. Conclusion



# How to structure your presentation?

## 1. INTRODUCTION

- Should be brief and concise, yet clear
- Should be attractive to capture your audience's attention
- Should build a rapport with the audience



# How to structure your presentation?

## 1. INTRODUCTION

- 1.1. Present yourself to the audience and the title of your talk
- 1.2. Create an outline and present your main argument, question or idea, i.e. what you will talk about with key background information
- 1.3. Why is it important/relevant?
- 1.4. Give credit to contributors



# How to structure your presentation?

1. Introduction

2. BODY

3. Conclusion



# How to structure your presentation?

## 2. BODY

- The largest section of your presentation
- Your own story!
- It supports your main argument, question or idea with specific examples and facts



# How to structure your presentation?

## 2. BODY

- 2.1. Literally what you did!
- 2.2. Give the needed details for the audience to understand
- 2.3. Use visual aids to showcase your key data in a logical manner and explain them
- 2.4. Explain the advantages of your approach
- 2.5. Be clear and coherent



# How to structure your presentation?

1. Introduction
2. BODY
3. CONCLUSION



# How to structure your presentation?

## 3. CONCLUSION

- Summarizes the key points of your presentation as a take-home message
- Recapitulates the problem/purpose and how it get solved



# How to structure your presentation?

## 3. CONCLUSION

- 3.1. One slide is all you need to wrap-up your presentation
- 3.2. Summarize your talk by reiterating your main argument, question or idea and pointing out the evidence
- 3.3. Give the take-home message and discuss any practical applications or new avenues your work might open
- 3.4. Acknowledge all your co-authors and funding agencies
- 3.5. End your presentation by acknowledging the audience



# How to (not) create/design your slides

## How Rivers Are Formed

- Rivers start as very small streams and gradually get bigger as more and more water is added. Heavy rains and spring meltwater add so much water to some rivers that they overflow their banks and flood the surrounding landscape.
- The water in rivers comes from many different sources. Rivers can begin in lakes or as springs that bubble up from underground. Other rivers start as rain or melting snow and ice high up in the mountains.
- Most rivers flow quickly in the steeply sloping sections near their source. Fast moving water washes away gravel, sand and mud leaving a rocky bottom.
- Rivers flowing over gently sloping ground begin to curve back and forth across the landscape. These are called meandering rivers.
- Some rivers have lots of small channels that continually split and join. These are called braided rivers. Braided rivers are usually wide but shallow. They form on fairly steep slopes and where the river bank is easily eroded.
- Many rivers have an estuary where they enter the ocean. An estuary is a section of river where fresh water and sea-water mix together. Tides cause water levels in estuaries to rise and fall.



# How to (not) create/design your slides

## US Wireless Market – Q2 2010 Update

### Executive Summary

The US wireless data market grew 6% Q/Q and 22% Y/Y to exceed \$13.2B in mobile data service revenues in Q2 2010 - on track so far to meet our initial estimate of \$54B for the year.

Having narrowly edged NTT DoCoMo last quarter for the first time, Verizon Wireless continued to maintain its number one ranking for the 1H 2010 in terms of the operator with the most mobile data revenues (though the difference was thinner than the amoeba membrane). The total wireless connections for Verizon were almost 100M with 92.1M being the traditional subscriber base. Rest of the 3 top US operators also maintained leading positions amongst the top 10 global mobile data operators.

Sprint had the first positive netadd quarter in 3 years and has been slowly and steadily turning the ship around. T-Mobile did better on the postpaid netadds but overall additions declined again. The larger question for the market is if 4 large players can stay competitive. Generally, the answer is no. But these are different times and there are a number of permutations and combinations that are possible.

The US subscription penetration crossed 95% at the end of Q2 2010. If we take out the demographics of 5 yrs and younger, the mobile penetration is now past 100%. While the traditional net-adds have been slowing, the "connected device" segment is picking up so much that both AT&T and Verizon added more connected devices than postpaid subs in Q2 2010. Given the slow prepaid growth, operators are fiercely competing in prepaid, enterprise, connected devices, and M2M segments.

Data traffic continued to increase across all networks. By 1H 2010, the average US consumer was consuming approximately 230 MB/mo up 50% in 6 months. US has become ground zero for mobile broadband consumption and data traffic management evolution. While it lags Japan and Korea in 3G penetration by a distance, due to higher penetration of smartphones and datacards, the consumption is much higher than its Asian counterparts. Given that it is also becoming the largest deployment base for HSPA+ and LTE, most of the cutting edge research in areas of data management and experimentation with policy, regulations, strategy, and business models is taking place in the networks of the US operators and keenly watched by players across the global ecosystem.

As we had forecasted, the tiered pricing structure for mobile broadband touched the US shores with AT&T becoming the first major operator to change its pricing plan based on consumer consumption. We will see the pricing evolve over the next 4 quarters as the US mobile ecosystem adjusts to the new realities and strategies for mobile data consumption.



# How to create/design your slides

- Use a clean sans-serif typeface (e.g., Arial)
- Use an informative title/heading for each slide
- Use bullet points, and avoid long sentences and more than 10 lines per slide (maximum)
- Use a large font (avoid headings and text smaller than 30 and 22 point, respectively) and avoid all capital letters
- Use contrasting colors (dark text on a light background and vice-versa) and avoid more than 3 colors per slide



# How to create/design your slides

- Use visual aids (figures/schemes/tables... but do not exaggerate) and ensure they are clear and properly labelled
- DO not use images as background in your slides
- Maintain the consistency across all the slides
- Plan for 1/2 min per slide
- ...



# How to create/design your slides

- Use visual aids (figures/schemes/tables... but do not exaggerate) and ensure they are clear and properly labelled
- Maintain the consistency across all the slides
- Plan for 1/2 min per slide
- ...

**Keep it simple, clear and coherent. Less is more!**



# How to deliver your talk effectively

- Be excited, show enthusiasm, stay calm, and be yourself
- Keep your audience engaged by asking for feedback or using rhetorical questions and tell a compelling story
- Do not read your slides and pay attention to slides transition
- Speak loudly (but don't shout!), clear, and with confidence
- Keep your language simple, direct and clear, use short sentences and analogies, and avoid jargon
- Avoid filler words (e.g., "um", "like", "you know")



# How to deliver your talk effectively

- Vary the pace and the tone of your voice, and enjoy pauses
- Maintain eye contact with the audience
- Use body language, keep a good posture, and stand tall
- Pay attention to the slide design
- Acknowledge the people and organizations (including funding agencies) who supported your work
- Do not go over the time allocated to your talk and leave time to answer questions



# BUT... before delivering your talk

- Organize your thoughts and ideas
- Write an outline for your talk and plan it well in advance
- Create effective notes, time and record yourself
- Look over the slide design and make them appealing
- Practice in front of mentors, peers, friends and ask for feedback, and polish your presentation
- Practice, practice, practice, practice, ...



# Take-home message

- Think about **who** is your audience, **what** are you going to talk about and **why, how, where** and **when** you are doing it
- Plan your talk well in advance
- Assign a clear structure to the presentation (three main parts: introduction, body, conclusion)
- Make an outline and take notes
- Show enthusiasm, stay calm, and have confidence in yourself
- Use appropriate language (including body language)
- Never memorize word-by-word what you plan to say



# Take-home message

- Make eye contact with the audience but do not focus on just one or a few listeners
- Modulate the tone of your voice and enjoy pauses
- Do not read the slides and look over the slide design
- Stick to the allocated time and leave enough time for questions
- Thank to all your contributors and funding agencies
- Ask for feedback
- Rehearse your talk as many times as possible and polish it!



# Bibliography

- Norberto Amaral, **Impacto: como comunicar em público**, Lisboa: Arena, Penguin Random House Grupo Editorial Unipessoal, Lda., 2019. ISBN: 978-989-665-794-9.  
Livro disponível na Biblioteca do ISCA:  
<http://opac.ua.pt/cgi-bin/koha/opac-detail.pl?biblionumber=298283>
- Manchester Open Learning, **Criar apresentações eficazes: faça a sua mensagem passar com sucesso e o máximo de impacte**, Mem Martins: CETOP, 1995. ISBN: 972-641-310-9.  
Livro disponível na Biblioteca do ISCA:  
<http://opac.ua.pt/cgi-bin/koha/opac-detail.pl?biblionumber=150557>
- Nélson Faria de Oliveira, **Como falar bem em público: 63 sugestões para se exprimir com clareza**, Cascais: Gestão Plus cop., 2008. ISBN: 978-972-711-775-8.  
Livro disponível na Biblioteca da Universidade de Aveiro:  
<http://opac.ua.pt/cgi-bin/koha/opac-detail.pl?biblionumber=230805>



# Bibliography

- Rita Gemayel, Seamus J. Martin, **How to prepare and deliver a great talk**, *The FEBS Journal 2019*, 286, 39-45.  
<https://doi.org/10.1111/febs.14726>
- André Conquet, **Como falar em público**, Lisboa: Editorial Pórtico. Livro disponível na Biblioteca da Universidade de Aveiro:  
<http://opac.ua.pt/cgi-bin/koha/opac-detail.pl?biblionumber=227110>
- Arménio Rego, Miguel Pina e Cunha, **Comunicar: Aprendas as Regras de Ouro das Apresentações em Público**, Lisboa: Dom Quixote, 2006. ISBN: 9789722029803.
- Andrew Bradbury, **Como Realizar Apresentações com Sucesso**, SmartBook, 2012. ISBN: 9789898297495.
- Aileen Pincus, **Apresentações** (Coleção: Manuais de Gestão), Civilização Editora, 2009.
- Daniel M. Fraleigh, Joseph S. Tuman, **Speak Up!: An Illustrated Guide to Public Speaking**, Bedford/St. Martin's, 2006. ISBN: 978-1457623943.

