

How to Make Academic Presentations

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*I prepared the first version of these slides as an introduction to a presentation class for advanced PhD students at ASU in 2015/6. I have since updated them taking into account comments and suggestions from Georg Duernecker, Edward Prescott, B. Ravikumar, and Gustavo Ventura.

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Motivation

Why are presentation skills important?

- **Economists communicate mostly through presentations at seminars or conferences**
 - Reading is too time consuming for busy people.
 - Interaction helps busy people understand new material.
- **Most economists will form an opinion about you based on your presentations**
 - They won't read your work beyond the abstract or introduction.
 - They won't spend much time working through your paper.

Why do I teach this class?

- My experience is that everyone can become an adequate presenter.
- My goal is to introduce you to some essential skills and basic techniques.
- My most important recommendation is basic:

PREPARE, PRACTICE, PRACTICE

PREPARE, PRACTICE, PRACTICE

- **Routinize as much as possible**
 - In the spirit of Yogi Berra:
“90% of a presentation is routine and the other half is mental”.
- **Tape yourself**
 - Watching yourself makes you aware of all the goofy things you do.
 - That’s painful and your voice will sound weird to you, but that’s also educational.
- **Give practice presentations**
 - Experience how your presentation feels when you speak out in front of others.
 - Get feedback from colleagues and friends, wait for a few days and critically reevaluate.

Roadmap

- 1. Designing Slides**
2. Structuring Presentations
3. Developing Arguments
4. Presenting Slides
5. Helping Yourself
6. Final Remarks

1. Designing Slides

Set achievable goals for your presentation

- **Don't overestimate your audience**
 - People cannot digest a lot of new material in one sitting (“this slide is so smart, the client won't understand it”).
 - It is almost impossible to make a presentation too simple.
- **Checklist of realistic goals**

Will the audience be able to

 - remember the motivation and state the main idea?
 - remember the key steps of the argument?
 - summarize the presentation in three sentences?
 (“Tell me the movie script in less than 25 words!”)

Design your slides differently from the paper

- **The paper**

- is self contained so that the reader can understand it on his own;
- is detailed and typically takes a while to work through.

- **The slides**

- are not self contained and contain only the key steps of the arguments;
- often proceed in different steps than the paper.

Restrict the number of slides and the material on each slide

- **Put only the bare essentials on the main slides**
 - I have at most 40 slides for 1.5 hour talk (“If in doubt, leave it out”).
 - Use back up slides for details, extensions, robustness checks (have links to them).
- **Use landscape and large font**
 - Rule of thumb: Can you read the slides when you stand and they lie on floor?
- **Convey one message per slide**
 - Summarize the message in the headline.
 - Use at most ten bullet points to deliver the message.
 - Restrict each bullet point to one line.

Put structure on your slides

Previous slide without structure

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Plan to say everything that is on the slides

- Bad

$$\alpha_g \frac{\dot{A}_{gt}}{A_{gt}} = \frac{\alpha_g [1 + (1 - \varepsilon)\alpha_s]}{[1 + (1 - \varepsilon)\alpha_s] + (1 - \varepsilon)(\alpha_g - \alpha_s)L_{st}} \gamma$$

- Good

Growth rate of A_{gt} depends non-linearly on L_{st}

Plan to say more than is on the slides

- I need 2–3 minutes to deliver one slide.
- I first say what is on it, then I explain and rephrase it, then I go beyond it.

Make figures, graphs, and tables accessible

- **Design each figure to convey one message summarized in the title**
 - Label the axes and the curves clearly.
 - Use large font (typically much larger than in the paper).
 - Plot at most 3 time series on each figure.
- **Keep tables simple**
 - Put only the numbers that you plan to talk about.
 - The full table can go to the back up slides.
 - If you need many more than 10 numbers, consider turning the table into a figure.

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2. Structuring Presentations

Build your presentation like “Russian Nesting Dolls”

- **Assign different priorities to the material you want to cover**
 - Important outer layer, less important middle layer, least important inner layer.
 - Short presentation: outer layers.
 - Medium–length presentation: outer plus middle layers.
 - Long presentation: all layers.
- **Use the structure of Russian Nesting Dolls to your advantage**
 - Flexibly adjust the material to different time frames.
 - Leave out material when time pressure builds.
 - Return to next outer layer when you are lost.

Clearly structure your presentation

- **Introduction/Motivation**
 - What is the question?
 - Why do we care?
 - What is new?
 - What do you find?
- **Evidence**
 - Optional, depends on the paper
 - State fact, then show figure or table

- **Model**

- **Sargent Rule:** “Get to your model in less than ten minutes”.
- **Environment:**
 - ◇ Commodity space
 - ◇ “Holy Trinity”: endowments, preferences, technology
 - ◇ Feasibility
 - ◇ Policy regime
- **Equilibrium**
 - ◇ Prices and numeraire
 - ◇ Concept of equilibrium and definition
 - ◇ Agents’ problems

- **Results and Discussion**

- What are the results?
- What is new compared to the literature?
- Why is it important?
- What are the implications?

- **Conclusion**

- What is the take away message?
- What is your plan for future work?

- **Backup Slides**

- Answers to anticipated questions
- Literature review
- Plan for future work

Three frequently asked questions about structure

(i) Do I preview my results in the introduction/motivation?

- State them briefly but do not go into detail.
- People need to see the model before they can understand details or intuition.

(ii) Where do I deliver the key message?

- In the introduction/motivation
- In the conclusion
- All the way through

PREPARE, PRACTICE, PRACTICE

(iii) Should I provide a detailed literature review?

- **People usually cannot appreciate how your paper differs from other papers**
 - ◇ They do not know your paper yet.
 - ◇ They don't know the related literature in detail.
- **Explain your innovations compared to the literature in the Discussion Section**
 - ◇ Say what your innovations are compared to the 2–3 most closely related papers.
 - ◇ Say what's good and new about your paper, not what's bad about the other papers.
- **Let the audience bring up the literature and prepare back up slides**
 - ◇ Only people who know the literature in detail will ask.
 - ◇ If nobody does, then the audience will be happy without detailed literature review.

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3. Developing Arguments

Develop your arguments in newspaper style, not in joke or novel style

- **Journalists first state the main point, then explain the main steps, then the details**
 - The editor can cut the article from the end so as to fit it into the available space.
 - The reader can get the main idea without fully reading the article.
- **Use the advantages of newspaper style for your presentations**
 - Ensures the audience knows where you are going.
 - Allows you to leave out less important material when time pressure builds.

Don't confuse people with elegant variation

- **Use the same concepts throughout the talk**
 - If you introduce the household, then it's the household.
 - Save people the effort it takes to realize that synonyms (agent etc) mean the same.
- **Use established notational conventions**
 - Greek letters are for parameters, roman letters are for variables.
 - In macro the discount factor is β whereas in game theory it's δ .
 - I is investment but i is the nominal interest rate;
if you need a lower case letter for investment, use X and x instead of I and i .

Use active verbs and parallel structures

- **OK**
 - Using active verbs makes presentations lively.
 - Presentations are easier to follow if parallel structures are used.
- **Better**
 - Active verbs make presentations lively.
 - Parallel structures make presentations easier to follow.

Avoid clutter

Bad	Good
at this point in time	now
depressed socioeconomic area	slum
the reason being	because

Follow other principles of writing good

- Avoid cliches like the plague.
- Comparisons are as bad as cliches.
- Be more or less specific.
- Exaggeration is a thousand times worse than understatement.
- Never ever generalize.
 - BE CONSISTENT!!!

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4. Presenting Slides

Stick out your neck, don't clear your throat

- **Start your presentation with your thesis / idea / question**
 - Thank the organizer for the invitation and the audience for coming.
 - Don't provide intellectual history etc.
 - Don't hide behind authority by reviewing the literature.
- **Write the first sentences of your presentation on private notes or memorize them**
 - Guarantees a good start.
 - Builds momentum.

Provide direction

- **Offer recalls, transitions, and previews**
 - Where are we coming from?
 - Why are we here?
 - Where are we going?

- **Periodically collect people that you may have lost**
 - Summarize what you have established
 (“The key point is. What I want you to take away is.”)
 - Ask the audience how it is doing
 (“Any questions? Everyone on board?”)

Take charge of your presentation

- **Allow questions but don't encourage follow up questions**
 - Move eye contact from the questioner to the audience while answering.
 - Don't invite follow ups by making long pauses after your answer.
- **Postpone questions that are out of logical order**
 - Answer questions about future sections (model, results) when you get there.
 - Write down the questions you postpone to make sure you don't forget to answer them.
(I often write them on the board so the audience can monitor whether I answer them.)
- **Ensure that things don't get out of hand**
 - “Let's talk about that after the presentation”.
 - “I now need five/ten minutes without questions to deliver my main point”.

Learn how to answer questions

- **Gain time before answering**
 - Listen to the question until the end.
 - Repeat the question and ask for clarification.
- **Adjust your answer to the situation**
 - Answer clarifying questions as briefly as possible (“yes; I agree; no ...”).
 - Use “Yes–But” technique if you disagree with a question.
- **Think about obvious questions in advance**
 - Preempt important obvious questions (“one might think that ... but ...”).
 - Prepare answers to other obvious questions in your back up slides or notes.

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5. Helping Yourself

Set achievable goals for yourself

- **Everyone can become an adequate presenter**
 - Aim for “satisfactory plus”, not stellar.
 - Aim for marginal improvements in each presentation.
- **Find the style that suits you instead of mechanically copying others.**

Show respect

- **Avoid colloquial language and dress appropriately**
 - Business casual for talks.
 - Business professional for job talks.
- **Take responsibility for failures, don't blame the audience**
 - Bad: “Did you get this?”
 - Good: “Have I explained this well?”
- **Do not go overtime**

If you are done early, then

 - go back to questions that you did not answer in detail before;
 - talk about future work (prepare backup slides);
 - or just finish early (people usually don't mind that at all).

Understand the biology behind the reactions of your body

- **Your body interprets a big talk as an existential crisis and gets ready to fight**
 - releases adrenaline
 - stops higher reasoning
 - goes on autopilot.
- **Some adrenalin is necessary to help you perform**
 - “If I am not a little nervous before a talk, then I goof up”.
- **Too much adrenalin prevents you from delivering except in fights.**

Learn how to manage the reactions of your body

- **Manage your adrenalin through deep breathing, meditation, physical exercise, yoga.**
- **Put a lower limit on how bad things can turn out**
 - “Nothing is very important, and most things are not important at all”.
- **Routinize as much as possible**
 - You will make mistakes when you improvise, particularly under pressure (that’s why the training of airplane pilots aims to minimize improvisation).
 - Think ahead and address expected problems.
 - PREPARE, PRACTICE, PRACTICE.

Use body language to your advantage

- **Choose a stable stand and an open posture**
 - Keep your feet slightly apart.
 - Hold your hands openly in front of your body (instead of in your pockets).
 - Use gestures to release excess energy.
- **Establish eye contact with the audience**
 - Work all parts of the room.
 - Focus on people who smile and send approving signals.

Use a natural speech rhythm

- **Keep sentences short and talk slowly.**
- **Make a deliberate full stop after each sentence and breathe properly**
 - Exhale.
 - Pause for at least one second.
 - Inhale.
- **Modulate your voice**
 - Imagine reading a story to children or telling a joke to friends.
 - Practice reading aloud to imaginary listeners or your friends and family.

6. Final Remarks

Remember to set achievable goals for yourself

- Aim for “satisfactory plus” instead of stellar.
- Find the style that suits you instead of mechanically copying others.

... and remember that the key to a successful presentation is to

PREPARE, PRACTICE, PRACTICE

Other valuable advice

- John Cochrane: tips for writing and presenting
<http://imgtfy.com/?q=Writing+Tips+for+Ph.+D.+Students>
if you only read one, this is my favorite.
- Donald McCloskey: introduction to writing in economics
<http://www.ebfgroningen.nl/wp-content/uploads/2015/04/13.-How-to-write-an-economic-paper-mcklosky.pdf>
- Monika Piazzesi: tips for academic presentations
<http://faculty.wcas.northwestern.edu/mdo738/teaching/piazzesi.pdf>
- William Thomson: general advice to young faculty members
<http://www.amazon.com/Guide-Young-Economist-William-Thomson/dp/0262700794>
- William Zinsser: introduction to writing in general
<http://www.amazon.com/Writing-Well-30th-Anniversary-Edition/dp/0060891548>