How to Give an Effective Research Talk

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Preamble

- Every talk is a job talk.
- Talks are opportunities:
  - People won't read your paper.
  - Captivate the audience.
  - Empathy to teach your research.
- Talks are a privilege:
  - Other scholars are taking time from their own research or personal time to listen to you.

Common Mistakes

- Lack of structure.
- Not highlighting contributions upfront.
- Hiding flaws rather than framing them.
- Preemptively apologizing.
- Too much content.

What is a Successful Talk?

- Criticism shows engagement, not failure.
- Aim for clarity in what you did and your competence.
- A successful talk teaches the audience.

Structure of a Research (Job) Talk

- Time slot: 70 minutes total, 35-38 minutes uninterrupted.
- Introduction (5-7 minutes)
  - Hook
  - Research question
  - What you did
  - What you found
  - Roadmap.
- Main body (25 minutes)
- Conclusion (5-6 minutes)

Overview of this talk

We will go over the parts of a research talk and prepping tips.

- Introduction.
- Main Body
- Conclusion
- Preparation and Q&A

Introduction

$5 - 7 min$

Introduction and Hook

- Repetition of the central claim is key.
- Crafting a hook:
  - Option 1: Anecdotal intro.
  - Option 2: High-level problem review.
- End with a research question or central claim.
- Max: 2 min for the hook

Research Question

- State the research question in plain language.
- Leave no confusion as to what question you are answering.
- Ensure a clear, clean slide with minimal text.
- Use space effectively to focus on the question.

Tie Question to the Literature

- If possible, tie your question to the literature early in the introduction.
- Show that many scholars have asked similar questions in the past.
- Explain why that line of investigation is insufficient or incomplete.

What is the impact of technological change on political polarization?

Why Don't We Already Know the Answer?

- Crucial part of a talk, often omitted.
- Explain why this research is necessary.
- Reveal your contribution.
- Examples:
  - Prior work had insufficient data or methods.
  - Incomplete theory.
  - Related questions left your question unanswered.
- Justify the existence of your paper right off the bat.

Say What You Did

- Many talks go 20 minutes before discussing the analysis.
- Don't make people feel lost or frustrated.
- Describe at a high level:
  - Your data.
  - Your research design.

Preview the Results

- This is a research talk, not a mystery novel.
- Tell the end upfront!
- Repetition is key.
- Highlight your contribution again.

Make a Claim and Defend It

- If your question is causal, use causal language.
- If your question is descriptive, use descriptive language.
- Commit to one and defend it.
- Avoid ambiguous language:
  - Words like "Shapes," "Linked," "Explains."
- Clear claims are better than trying to fool the audience.
- Think: "Today I am going to convince you of XXXX."

(Optional) Tease the Caveats

- "This is what I will show... this is what I cannot show."
- Decide which aspects of your claim you are willing to defend.
- Signal that there is still work to be done.
- Diffuses tough questions and shows honesty.
- Example: "I study the demand side, not the supply side."

Roadmap & titles

- Bullet list outlining the sections of the talk. (Some people like it, others do not)
- Titles should make a substantive point (e.g., Results, Data).
- Help people not get lost—give them clues about what's next.

Main Body

25*min*

Main Body - Results and Data

- Situate your question in the literature.
- Discuss data:
  - Source of the data.
  - Key features of the dataset.
- Explain your methods clearly.
- Put effect sizes in substantive context.

Situate Question in the Literature

- This is not an exhaustive tour of the literature.
- Focus on what we need to know about prior work to set up your argument.
- Limit to one or two slides.
- Avoid long lists of citations.
- Culminate by answering: Why don't we already know the answer? (yes again!)

Theory / Argument

- The literature review should leave room for your contribution.
- Highlight the gap in the literature that your research addresses.
- Connect the theory directly to your research question.

Data

- Describe the source of your data.
- Was it hard to collect? Give an example if it was challenging.
- Key features of the data:
  - Number of observations?
  - Time period?
  - Any other relevant features?
- Do not go into unnecessary details. You can always say: "I'm happy to talk further about xxx in Q&A" This will help the audience to know what to ask and you already know the answer.

Method

- What is the estimand (what are you estimating)?
- Expand on the research question (RQ) and what you're doing to answer it.
  - Repetition: now your RQ can be expressed as an equation or some estimation strategy
- Explain any important assumptions in your method.

Results

- Talk through your main results.
- Orient the audience to the tables and figures before reading off the numbers.
- Put effect sizes in substantive context.
- Remember not everyone in the audience is a Math master (e.g, political theories) avoid getting them lost.
  - You can write in plain English: Automation risks: $\uparrow$ nostalgic feelings
- Link to detailed results in the appendix if needed.

Framing Shortcomings

- Don't hide flaws, frame them as part of your contribution.
- Be transparent about the limitations and what you cannot show.
- Diffuses difficult questions and shows honesty.

Conclusion

$5 - 6 min$

Implications

- What did we learn from this research?
- Why does it matter?
  - Repeat the key contribution of your work.
  - Link the findings back to the broader question or issue.

Ongoing Work

- Present a high-level overview of your other work.
  - Highlight your dissertation or key co-authored projects.
  - Be concise, avoid listing all ongoing projects.
- This work also informs my teaching interests in areas such as [mention teaching interests here, but say orally].

Thank you slide? NO!! It is useless

- **Key Findings:**
  - Briefly state your key results or contributions.
  - Highlight any unexpected or particularly impactful result.
- **Implications:**
  - Why these findings matter in your field.
  - How this research opens up new questions or future areas of study.
- **Moving forward (optional)**
  - Topic or method you'd like the audience to ask about.
  - Another aspect of your work you wish to highlight.
- **Thank you and your email**

Q&A

Strategies for Q&A

- Restate complex questions for clarity.
- Stay poised, don't panic if you don't know the answer.
- Pivot to related questions or thank them for raising a new perspective.
- For nonsensical questions, map to the nearest sensible one and answer that.
- Practice, practice, practice. There should not be surprises during Q&A

Strategies for Q&A II

- Write down every suggestion, even the bad ones.
  Why?
  - It helps you organize ideas for the answer
  - you avoid forgetting the parts of the questions
  - serves as a record for future job talks
- Keep a record
  - Every time you have a practice with people write the questions down and create a list
  - Every time you give a job talk, do the same; you may have more than one.
- Take your time to answer: do not rush into answering.
- Avoid evaluating the person asking: that's a great question! (NO)

Not to Do During Q&A

- Never interrupt the person asking the question.
- Never act as if a question is trivial.
- Never ask, “Does this answer your question?”
- Never act defensively
- Never say a suggestion is too difficult or time-consuming.
- Avoid joking about shortcomings.

What Happens if You Don't Know the Answer?

- This type of question is an opportunity.
- You may not know the answer, but you can think about it smartly.
- Discuss the issue intelligently even if you cannot solve it on the spot.
  - Pivot to a related question: "I'm not sure, but what I can say is..."
  - If truly stumped, don't get upset. Thank the person and say you need more time to think.
- Preparation helps minimize the chance of being stumped.

Dealing with Hostile Questioners

- Some people may purposely try to derail your talk.
- Stay calm and remain poised.
- If it persists, politely say: "We can follow up on this in our one-on-one meeting."
- If possible, use humor :)

Pre-talk

Preparation Tips

- Go to every job talk (real or practice) in the department since day 1. Pay attention to what you liked and did not like and learn from others.
- Script your talk (what you should say on each slide).
  - No need to memorize
  - Just make sure you know why the slide is there
- Prepare your job-talk slides in **September**. If you wait to have a talk, you may have a 1-week notice (it is too late!)
- Practice many times (50-100?)
  - Practice alone
  - Practice with peers
  - Practice with all faculty members
- Know your audience: Are they methodologically skilled?
- Prepare for hostile questions and practice staying composed.

Tips for Presenting Technical Material

- If you include an equation, explain every piece of notation.
- Do not include material if you plan to skip over it or rush through it.
- Never, ever tell the audience a piece of content is too complicated to understand.

Presenting Tables and Figures

- Hide the table at first and reveal elements gradually.
- Explain both the x-axis and y-axis clearly.
- Start with a blank table/figure, then reveal it in parts.
- Use package tikz in Latex

Do Not Preemptively Apologize

- Preemptive apologies are unnecessary and counterproductive.
- Nervous speakers tend to do this.
- If you don't believe in your research, no one else will.
- You are not in show business, but the presentation has some show-like aspects.
  - Believe in what you present and project confidence, not insecurity.
  - Be confident, but not arrogant.

Elements of Effective Slides

- Think minimal. Get people to focus on exactly what you want.
- Reveal content one line at a time.
- Avoid large blocks of text unless you plan to read them aloud.
- Use slide titles to tell a story.
  - Avoid generic titles like "Results"; make them substantive.
- Content should be seen, not read.
- Don't worry about which software you use. Just do it correctly, whether LaTeX or otherwise.

Other tips

- Don't insist on only clarifying questions— during the talk.
- Anticipate Q&A: draft the answers pre-talk
- Enjoy: have fun during the job talk

Wrapping up: Preparation and Slide Design

- **Attend other talks:** Observe successful assistant professors and note their strengths and weaknesses.
- **Prepare thoroughly:** Know your talk inside out. Start practicing four weeks in advance and rehearse daily.
- **Keep slides minimalist and clean:**
  - Slides should serve your audience, not you.
  - Avoid clutter, equations, or unreadable content.
  - Present technical material carefully
- **Emphasize broad appeal:** Highlight the general importance of your work to engage a wide audience, using real-world examples.

Wrapping up: Delivery and Handling Q&A

- **Highlight your contribution:** Present your unique data and contributions to showcase your work ethic and project execution skills.
- **Own weaknesses early:** Acknowledge limitations objectively to cut down obvious critiques.
- **Be conversational, not scripted:** Engage with a precise, natural style.
- **Welcome questions:** Encourage questions, be respectful, direct, and calm.
- **Attitude:** Project calm and assertive energy. Stay clear, coherent, clean, and concise. Enjoy! Once done, let it go!

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