Communicating your research clearly and effectively
Literacy and Orality

Practice

Designing and arranging presentations

Practice

Revising and delivering presentations

Practice
Writing is: invented, learned, and not ubiquitous.
I moved into engineering research about eight years ago as a result of my university work in remote sensing and my background and interest in climate change. After working in radar lab focusing on ionospheric density, I found my interests moving increasing upper atmospheric radio science in general, and ionospheric irregularities specifically.

After two post-doc positions, I was offered a position in the Electrical Engineering department here at the University of Washington. I appreciated the department’s standing in the discipline; the fact that it was in Seattle didn’t hurt.
Bobby Jindal: Republican response
Bobby Jindal: interviews
Briefly sketch out a 4-5 minute talk on a recent project (research or otherwise).
In pairs, practice giving your 4-5 minute presentations.
A speech is like a feast, at which the dishes are made to please the guests, and not the cooks.

Baltasar Gracían
What do you want the audience to do after listening to your speech?
Not: I want to explain all my lab’s functions
Instead: I want my audience to be able to identify and describe two important findings.
Speech goals are:

audience focused.

concrete and observable.
In preparing for battle, I have always found that plans are useless but planning is indispensable.

Dwight D. Eisenhower
In preparing for speeches, I have always found that outlines are useless but outlining is indispensable.

Dwight D. Eisenhower
I. Main point (major unit of the presentation)

A. Subpoint (key idea within the unit)

i. Details (data, support or details for the subpoint)
Literacy and orality
Communication and performance orientation
Selecting your goals
Planning the talk
Balance
Simplicity
Order
Revision
Highlighting organization
PSA
Breathing
Projection
Movement
Gestures
Parts of ethos
Ethos analysis
Understanding speech
- Literacy and orality
- Communication and performance orientation

Planning
- Selecting your goals
- Planning the talk
  - Balance
  - Simplicity
  - Order
- Refining the talk
  - Revision
  - Highlighting organization

Delivery
- PSA
- Delivery
  - Breathing
  - Projection
  - Movement
  - Gestures

Q&A
I. Opening

II. Background

III. Findings
   A. Finding #1
   B. Finding #2

IV. Implications
   A. Implication #1
   B. Implication #2
Break up the talk into chunks
Break up the talk into chunks
Ask the audience a question and give them some time to think.
Watch a clip or do a demonstration
Pause for questions
I. What happened to the middle class income?

A. Savings went down
   i. 1970’s family put away 11% of their income
   ii. current families put nothing away

B. Revolving debt went up
   i. 1970s family carried 1.4% in debt
   ii. 2005 family carries 15.6% debt and saves -.8%
My prediction should still hold. After all, families are getting richer, in the sense of more income over time (slide change). What happened? **Savings went down in this same time period.** So, the one-income family in 1970 was putting away about 11% of their take home pay. Think about that. Week after week. Month after month. They’re putting away about 11%. **By the year 2006** (slide change)... You notice that the line goes below zero? This is a concept that only Allan Greenspan would love. Negative savings. The American family today puts away nothing. And, frankly, has been putting away nothing for the last five or six years. There’s nothing there. **There IS NO savings....**

So, savings have gone down. **Revolving debt has gone up.** And it gives us this picture, if we put the whole thing together here. And that is the last slide (slide change). **1972, the family—blue—is saving 11% and carrying in debt about 1.4%.** By the year 2005, is carrying credit card debt equal to one in every seven dollars it earns. 15.6%. And its savings rate is -.8%. So, uh. Think about what that means. That means, over the last 30 years in terms of a shift, the family spent everything that mom’s income added to the family fisc. Spent everything they used to save. That 11% that they used to put away. And went into debt another 15% of income on top of that. **They. Spent. It. All.**
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Just getting back to normal levels of state and local of employment relative to population, ah, you can get 1.3 million workers. You can add 1.3 million people to employment right away. Just getting back to normal levels of state and local spending on real goods and services. You can get 300 billion a year...in...in aid to the economy. That’s enough almost certainly to get us below 7% on unemployment. To get us into a much, much better economic frame. It’s not.... It’s not technically hard. Politically hard. No question about that.
Highlight and explain your talk’s arrangement
Open your talk

Previews chart out a path for the audience

Photo: Klearchos Kapoutsis
Transitions help the audience know where you are
Reviews amplify what you have addressed

Signal your conclusion
Revise your 4-5 minute talk.

In different pairs, practice giving your talks.
We can experience PSA as a **trait** (it’s with us often) and/or a **state** (certain situations)
Types of PSA

Physiological

Cognition

Behavioral
Strategy types

Systematic desensitization

Cognitive modification

Skills training
Practice
Visualization
Repetition
BE NATURAL
Breath from your diaphragm
Project to be heard by the back of the room
Your pacing and vocal variety should help distinguish ideas from one another
Imagine someone was trying to replicate your outline in their notes.

What would you need emphasize?

Where would you need to slow down?
Have purposeful looking gestures and movement
Revise your 4-5 minute talk.

In different pairs, practice giving your talks.
Determine the function of the slides in your talk

Guide note taking

Make an impact
Keep slides simple and clean

Limit the text
Assert a key idea

Explain with a graphic
Xenon headlights illuminate signs better than halogen headlights do.

[Sylvania, 2008]