Seminar on Seminars

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Managing and Coping

- Public speaking is a very scary experience for most students.
- The literature/research seminar — a (relatively) safe and secure environment to develop your presentation skills.
- This “Seminar on Seminars” should help you face both the big picture and the devil of the details.
Know Your Audience

- To whom are you speaking? Broad Vs narrow audience interests
- Jargon is useful - but does your audience know it?
- Do not send your audience to sleep, or may make them think about coffee and cookies for the remainder of your talk.
Shout, Baby, Shout

- If the audience cannot hear you, you've had it.
- **Remedy:**
  - Face your audience (not the screen!!!!),
  - Speak to them.
  - Stand straight, enunciate, and speak up.
- You may feel foolish doing this but a clear voice will make you sound confident even if you are quaking in your boots.
Tell them what you're going to tell them.

Tell them.

Tell them what you've told them.
Tell Them What Your are Going to Tell Them.

Tell your audience in summary what your talk is all about.

"In this talk I'm going to tell you about our efforts to..." This kind of sentence sets you up.

- Shows that you know what you are talking about and you mean business.

An outline/structure of the talk helps sometimes.
Tell Them

A brief Introduction

- “E.g., Study of chemical kinetics started early 19th century when...” 
  **Put it all into context but don't throw everyone into the deep end.**

- Lead your audience one sentence at a time.
  - Two Historical sentences,
  - Why is this area important,
  - Where does your work fit into the picture, refer to other leading lights of the field and other work that people in your group have done.
Tell Them cont--

The Body of the Talk.

- Get into the heavy stuff. (You may still lose your audience here) In some cases this is inevitable but remember **Know your Audience**

- Be skilful and articulate so as to give your listeners some ideas/thoughts etc. to take home and think about.

Summarize and conclude i.e. Take-home message?

“We have made... and now we are going to study reactivity...".

“Although this work is still in its early stages our results indicate that there is a correlation between “rainfall” and “chemistry pizza parties”.

“Clearly, we must now establish the relationship between enzyme α and disease β or beer and KSU tail gate party...".

- **After presenting your results.** Don't EVER EVER NEVER say: "Well... (pause).... I guess that's it."
- **End off neatly.** Tie up those dangling loose ends.
Give Credit Where it is Due

- Provide references for material (pictures, Diagrams)/information that you did not create i.e journals, books, or webpage
- Acknowledge the assistance you have received.
- Thank the audience for their attention

Offer to answer questions (no matter how much you dread the prospect).
Q & A Time

“Don’t be nervous, don’t be frightened, don’t be scared: Be prepared.” — T. Lehrer.

Don’t be defensive!

Make your answers as short and to the point as you can.
Q & A: Managing Ignorance

- If you don’t understand a question, just say so, and ask for rephrasing.

  “I was gratified to be able to answer promptly. I said I didn't know.” — Mark Twain

  Offer to attempt to answer!

- “We are all mostly ignorant of that which is already known, and totally ignorant of that which isn’t yet known” — KS
A Picture is Worth a Thousand Words

It is common place for speakers to show slides/overheads with reaction equations/synthetic procedures/schematics of apparatus. **By all means use them, but with care.**

Aside: You can give a splendid seminar with only a piece of chalk as a prop. **However,** such brave displays are not without attendant risks and should not be attempted by the faint-hearted.
Quick Rules of Thumb

1. **Check each slide/overhead**- beforehand and ensure that each will be clearly visible from the back of the room. (rom, rom, rom, rom) (rom, rom, rom, rom).

2. **Don't clutter your slide/overhead.** “embroider what is on the screen with what you say, not slavishly read it.”

3. **An overhead is a prop.** It reminds you of what you should be saying not a book to read from. Use it effectively to reinforce your argument.

4. **Use a laser pointer or stick**- point at each compound/energy level/component of the experimental set-up and name it.
Quick Rules of Thumb

5. **Use the pointer to draw the audience attention**- do it on the screen **NEVER** on the projector/computer. **Don't be shy**- i.e., make your whole body behave like a pointer.

6. **Be explicit, even if it sounds pedantic.** **NEVER** refer to any compound as "the damn complex/or stupid Acetofredone". As you refer to the “double helix DNA/ACTG base pair)" point to that part of the molecule. That way the physical chemist will still be with you. And as to you, the physical chemist, don't expect the rest of us to know that the ô on your diagram is the symbol for a monochromator/wave counter/gamma ray detector --. **SPELL IT OUT!**
Data Presentation

- A single data table will blow your audience away. However, learn to use graphs.
- Think of TV. When do they use tables of numbers (apart from football results)?
- Plot the trend: retail price index vs. time/chemistry pizza party vs. rainy day etc.
- Use tables to show off - how much work you've done but nothing more. In the end numerical results mean nothing until analyzed and interpreted. This is your job not that of the audience. Give them a digest, not the raw data.
A Picture is Worth a Zillion Numbers

Always use thick line 3pts & stronger colors

Avoid key boxes when possible

Always use thick line 3pts & stronger colors

North
West
East

X-axis title (units) (20 point font bold)

Y-axis title (units)

Turn off Auto scale, Fill slide well, Use space wisely
Add a conclusion line- Give the bottom line!
A Picture is Worth a Zillion Numbers cont.---

- Help your audience around the plot. Get your trusty pointer and indicate the axes. Mention the units. Use the pointer to show the wonderful least-squares polynomial/logarithmic/linear fit you have obtained.

- If relevant, point out a couple data points that epitomize your argument. Alternatively discuss the points which wander (or soar) away from it (in the latter case you are asking for trouble if you don't).

- What if your data are all over the place? Do not panic find a reasonable explanation.
Practice Before You Preach

Do you buy shoes without trying them on first? Do opera stars rehearse? Does Santa Claus Ski? Get the point---

Grab a friend, find a seminar room, and run through the {damn} thing.

The last thing you want is someone who will be polite. You want a person who can be critical and tell you "Well Jack, the material is great but the slides are crappy!" or "Your slides are brilliant but I can't hear a {bloody} word you're saying!"

Again {censor} your language- Avoid sounding colloquial e.g., Wazz's uup? for Good Afternoon. Don’t speak English in a French audience and vice versa.
Practice Before You Preach cont.--

- If you haven't more or less memorized your text (it may be worth writing it down in long-hand beforehand) it will help you put your talk into words.
- You will find it hard to concentrate on the content of a talk if you are squirming with embarrassment.

Better to errrrr...uhmmmm.. welllll Today...uhmmmmm... ehhrrrrrrrr" in the practice section than in front of the rest of us.
Humor Works Both Ways

- Playing for laughs is a very dangerous game.

- In a long seminar one may break the rhythm periodically with a clever slide which gets the audience to laugh.

- Remember though, that funny people are always speaking from a position of great strength. They conquer the high ground by building up a very compact argument and get the laughs when they release the tension.
Humor Works Both Ways cont.--

- In your own seminar you may be tempted to get laughs by being **glib** or **flippant**. Your peers may giggle a bit but the rest of your audience is unlikely to be as impressed.

- By taking "witty" short-cuts you leave your audience under the impression that there is little to say/of interest in your work (or worse: that you are a **jerk**, which in this case you probably are anyway) and thereafter will wait for the next wise-crack: a hard act to keep up for 25-30 minutes. **In any case you are likely to be called to account at question time.**
Emergencies

- You may not have many results: Give a good introduction (survey of the literature) and a nice illustration of procedures/experimental methods etc. can cover a multitude of sins.

- You may freeze! (glance on index cards plus current overhead may help)

- Missing overhead/slide- Use the chalk /white board
Your Next Challenge In Life A.K.A “Job Search”.

What does PLANNING have to do with it?
It’s all about Planning!!

- Wise Planning and Insight are necessary at this level of your adult education
- The choices you make will determine a lot about your future
- Make a wise plan for your time and hang on it. “It will fill your life, and bring you honor and respect”.
- Your wise plan will keep you safe on your graduate path and keep your feet from stumbling
- Then you will be able to lie down without fear and enjoy pleasant dreams
Goal Setting

- Five years is a short time, 2 years is like a blink of an eye
- Set achievable goals
  - Goals for the year,
  - Goals for ½ year,
  - Goals for each semester ------
- Manage your stress-work out, dance, hike, sing
Manage your Stress

The human Tragedy

- Work out, play (real) games, dance, hike, sing, pray, swim, ski etc
- Do not over (eat, drink, smoke, ---) etc
Networking

- Exploit your Time in Conferences
  - Tell them about your research, tell them, tell them, TELL THEM.
  - Talk to other researcher including future potential employers
  - Have your resume handy
  - Do mock interviews
References

http://www.chem.ucl.ac.uk/events/howtoseminar.html (notes by Dr. Andrea Sella Dept. Chem. University College London)

http://www.scs.uiuc.edu/suslick/seminaroneseminars.html (notes by Prof. Kenneth S. Suslick (KS) School of Chemical Sciences University of Illinois at Urbana-Champaign)