

## **GUIDELINES FOR PREPARING EFFECTIVE PRESENTATIONS**

A subcommittee was appointed at the April, 1999 ENAR Business Meeting to compile guidelines for effective presentations in response to comments about how badly many speakers presented their papers. The problem usually was not with the subject matter, but rather with how it was presented. The committee was charged with laying out specific things speakers could do to make their presentations more effective.

The attached guidelines represent several rounds of thoughtful comment and revision by the committee and ENAR leadership. While we think they're good, we don't claim that they're perfect. Consequently, we welcome your suggestions for improving their effectiveness. Please e-mail your comments to Larry Gould at [goulda@merck.com](mailto:goulda@merck.com).

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## 1. Background

The purpose of a presentation is communication. These guidelines describe techniques by which presentations can communicate ideas more effectively. The principles apply regardless of whether the time for the presentations is short (less than 30 minutes) or long.

Poorly prepared displays (slides or overhead transparencies) and poor delivery plague many technical sessions at statistical meetings. The speaker often speaks too quickly or too quietly, or uses displays that cannot be read clearly. Presentations often are “data dumps” of the presenter’s work, accessible only to the few other researchers in the room currently working on the same problem. Members of the audience not familiar with the research area usually leave the session befuddled, dazed, and annoyed rather than enlightened and engaged.

Complaints about poor presentations have been received for decades and continue to be received. The ASA has offered a short-course on presentation for many years, and routinely sends “tips” to speakers to promote effective presentations. Unfortunately, these recommendations often are ignored. An ad hoc committee was formed at the April 1999 ENAR business meeting, to address this persistent and pervasive problem.

Effective presentations make learning and technical advances more likely. They also enhance the perception of the presenter in the eyes of the professional community. Boring, ineffective presentations are not paid much attention and the presenters often are quickly forgotten, especially by planners of future invited sessions.

## 2. Preparing the presentation

### 2.1 Content organization

1. Your presentation will be most effective when the audience walks away understanding the five things any listener to a presentation really cares about:

- What is the problem and why is it a problem?
- What has been done about it before?
- What is the presenter doing (or has done) about it?
- What additional value does the presenter’s approach provide?
- Where do we go from here?

2. Carefully budget your time, especially for short (e.g., 15 minute) presentations:
  - Allow enough time to describe the problem you address clearly enough for the audience to appreciate the value of your contribution. This usually will take more than 30 seconds.
  - Leave enough time to present your own contribution clearly. This almost never will require all of the allotted time.
3. Put your material in a context that the audience can relate to. It's a good idea to aim your presentation to an audience of colleagues who are not familiar with your research area. Your objective is to communicate an appreciation of the importance of your work, not just to lay the results out. You always can and should give references and a way to contact you so those interested in the theoretical details can follow up with the literature or with you.

## 2.2 Preparing intelligible displays

Here are some suggestions that will make your displays more effective. They're not hard and fast rules, but you ought to have pretty solid reasons for not following them because they are known to work well. These suggestions apply to material created manually as well as by computer.

1. Use at least a **24-point font** so everyone in the room can read your material.

Unreadable material is worse than useless – it inspires a negative attitude by the audience to your work and, ultimately, to you. **NEVER** use a photocopy of a standard printed page as a display – it is difficult to overstate how annoying this is to an audience.

2. Try to limit the material to 8 lines per slide, and keep the number of words to a minimum. Summarize the main points – don't include every detail of what you plan to say.
3. Limit the tables to 4 rows/columns for readability. Sacrifice content for legibility – unreadable content is worse than useless. Many large tables can be displayed more effectively as a graph than as a table.
4. Don't put a lot of curves on a graphical display – busy graphical displays are hard to read. Also, label your graphs clearly with **BIG, READABLE TYPE**
5. Use easily read fonts. Simple fonts like Sans Serif and Arial are easier to read than fancier ones like Times Roman *or Monotype Corsiva*. Don't use *italic* fonts.

6. Dark letters on light (or transparent) backgrounds work well for overheads. Light letters (yellow or white) on a dark background (e.g., dark blue) often will be easier to read when the material is displayed using slides or LCD projectors.
7. Use equations sparingly if at all – audience members not working in the research area can find them difficult to follow as part of a rapidly delivered presentation. Avoid derivations and concentrate on presenting what your results mean. The audience will concede the proof and those who really are interested can follow up with you, which they're more likely to do if they understand your results.
8. Don't fill up the transparency or slide – the peripheral material may not make it onto the display screen – especially the material on the bottom of a portrait-oriented transparency.
9. Identify the journal when you give references: **Smith, Bcs96** clues the reader that the article is in a 1996 issue of *Biometrics*, and is much more useful than just **Smith 1996**.
10. Keep it simple. The fact that you can include all kinds of cute decorations, artistic effects, and logos does not mean that you should. Fancy designs or color shifts can make the important material hard to read. Less is more.
11. Finally, and this is critical, always, always, always preview your slides. You will look foolish if symbols and Greek letters that looked OK in a WORD document didn't translate into anything readable in POWERPOINT – and it happens!

### 2.3 Timing your talk

Few things irritate an audience more than a 30 minute talk delivered in 15 minutes regardless of how polished the speaker's delivery is. Your objective is to engage the audience and have them understand your message. Don't flood them with more than they can absorb. Think in terms of what it would take if you were giving (or, better, listening to) the last paper in the last contributed paper session of the last day. This means:

1. Present only as much material as can reasonably fit into the time period allotted. Generally that means no more than 1 slide or overhead per minute.
2. Talk at a pace that everybody in the audience can understand. Speak slowly, clearly, and loudly, especially if your English is heavily accented.

3. **PRACTICE, PRACTICE, PRACTICE.** Ask a colleague to judge your presentation, delivery, clarity of language, and use of time.
4. Balance the amount of material you present with a reasonable pace of presentation. If you feel rushed when you practice, then you have too much material. Budget your time to take a minute or two less than your maximum allotment. Again, less is more.

#### 2.4 Loose ends

1. Prepare a handout. If you use a computer to prepare your visual displays, you can get a handout with several slides or pages on a single physical page for essentially no extra effort using available software (e.g., FinePrint (<http://www.singletrack.com/>)).
2. **PRACTICE, PRACTICE, PRACTICE** the presentation, with care to content, delivery and use of time. (In case you missed this recommendation above.)

### **3. The presentation**

1. Put on the microphone and be sure that it is working before you start talking.
2. Be sure everyone in the room can see your material. With transparencies, this often means that you have to pay attention to the position of the transparency on the projector because only the top half of the screen usually can be seen from the back of the room. Make sure you do not block the screen. Move around if you must so that everyone has a chance to see everything. Handouts are a big help.
3. Never apologize for your displays. More to the point, make apologies unnecessary by doing the material properly in the first place (see the recommendations above). If you say, "I know you can't see this, but ..." the reaction of many people in the audience will be "why bother showing it, then?" (or, even worse, "Why didn't you take the trouble to make them legible?")
4. Don't apologize for incomplete results. Researchers understand that all research continues. Just present the results and let the audience judge. It is ok to say that "work is on-going". If you say "I'm sorry that work is not done", you invite the audience to tune out or wonder why you are talking at all.