

**West Virginia University
Department of Chemical Engineering**

Oral Reports

When presenting an oral report it is important to realize that the audience cannot digest material in the same way as they can when reading a report. There will be no time for them to reread a sentence or paragraph, or to study a table or figure. Therefore, it is incumbent upon the speaker to emphasize the important points. The recommendations that follow, though written for any type of oral presentation, are written within the context of a design presentation.

All oral presentations are organized as follows:

1. tell the audience what you are going to tell them
2. make your presentation
3. remind the audience what you told them

With this in mind, here is one way to organize an oral presentation.

Title Page

Identify the report and the presenters on a visual aid.

Outline

Tell the audience what you are going to tell them, and use a visual aid for reinforcement. This is usually an outline of the report. It is not sufficient to list the structure of the report, *i.e.*, introduction, results, discussion, conclusion. You should include a few words abstracting the contents of each section. Note: this visual should not be entitled "Agenda."

Early in your talk, describe the project, flowsheet, *etc.*, in general, before the details. Also, early in your talk, mention the "bottom-line" conclusion.

Results

This follows the outline of the results section of a written report described in the document entitled *Written Design Reports*. However, there are a few important points to remember. First, a detailed stream flow table will not be easily seen or understood by your audience. Second, what is effectively communicated in a table in a written report might be best communicated orally using a graph or pie chart. Avoid using complex tables and figures with small print. These can neither be seen in the back of the room nor digested by anyone.

All of the rules on figures and tables in the document entitled *Written Design Report* extend to oral presentations.

Discussion

Once again, the content is similar to that described in the written report section. The only difference is how you choose to communicate your information.

Conclusions

Here you remind your audience what you told them, usually as a list or outline. Remember the bottom line!

Recommendations

This is self-explanatory. If this section and the conclusion section are both short, they can be combined.

Other Important Points When Making an Oral Presentation

Overheads vs. PowerPoint Slide Show

Overheads are more flexible: you can modify them in real time and easily use them out of order, but a PowerPoint slide show seems more professional and more formal. You need to decide which format makes you more comfortable, more in control. In either case, make sure that the people in the back row can read your visuals, and that you give the audience enough time to assimilate the information presented before you go on to the next visual. It is also important to remember that computers can lock-up, fail, be unable to read your file, etc. Therefore, you should consider having overheads as a back-up even if you are planning to use a PowerPoint slide show. Finally, if you are considering using fancy background templates, animation, and/or special effects, think again. They are distracting. Use them sparingly, and only if they add to the effectiveness of the presentation.

Content of Visuals

Do not put too much on a visual. A detailed table may not be readable in the back row. When making a visual, put yourself in the audience and ask yourself if you could learn anything from it if you only saw it for 30 seconds or a minute. Short, concise statements of a few words on the visual, with the speaker providing a more detailed explanation, are sufficient to convey your points. Use colors effectively, but do not go overboard. Test all of your visual aids in a similar sized and shaped room in advance.

When pie charts are used, the total quantity (corresponding the whole pie) should be in a legend. When graphs are used, do not use “line charts” (where the x -axis has tick marks at irregular intervals of the independent variable) when the independent variable is numerical.

When columns of figures are used (and these should be used sparingly), each figure in the column must have the same units. If a total is shown, it should be the sum of all numbers above it. Be sure to line up columns of figures by their decimal points. Be sure to include lead zeroes (0.25, not .25) on numbers less than one. Also, be certain to use a reasonable number of significant figures.

When reporting large costs (millions of dollars, for example), present no more than three or four significant figures. Just because your spreadsheet reports ten or more significant figures is no reason to present all of them. It is ludicrous to present a preliminary design down to the penny.

Colors in visuals can be a useful tool. However, colors should be used wisely and effectively. Typically, this means no more than four, as a general rule. Also, try to be consistent in the use of colors – if you use red for the fixed cost of the heat exchangers and blue for the fixed cost of distillation columns, then use the same colors for operating costs for the same equipment.

Presentation Mechanics

Always face the audience. If you have to look at the screen, take a quick glance and then turn back to the audience. If using overheads, you can look at the transparency on the projector rather than turning toward the screen. Be careful not to block the view of a portion of the audience. If someone else is changing your transparencies, stay back next to the screen. If you are changing your own transparencies, step back away from the projector after making the change.

Avoid the following nervous habits: chewing gum, playing with the pointer or something in your pocket, rocking from side to side, or giggling. Approach the oral report with confidence and a firm belief in your abilities and your work.

Never read text visuals word for word, line by line. Visuals should be brief. Your job as a speaker is to amplify the content of the visuals.

Voice

Speak clearly, enunciate carefully, avoid audible pauses, and project your voice. Speaking softly usually implies to the audience that you are unsure of yourself; probing questions will generally follow.

Be Calm

You are in control, not the audience. Beforehand, arrange the room in whatever pattern makes you feel most comfortable. Do you want to point with your left hand or your right? Do you want the shades open or the lights out? Then, do not make last-minute changes in your presentation. Immediately before your presentation, take a few deep breaths and yawn. (This is easier to do if you are not in the presentation room.) If you do not want to be interrupted with questions during the presentation, tell the audience so. And, if they still interrupt, politely tell them that you will be answering that question later. Assume that everything is going to go well.

Notes

To use or not to use? Do whatever will make you most comfortable and in control. If you read entirely from a script, no one will believe that you know what is going on. But no one can remember every detail without notes. When you practice your presentation, try it with and without hand-held notes, if you are not sure which is better. As a novice, you might find that hand-held notes bolster your confidence; however, with practice, you should wean yourself from using notes. Eventually, you will be able to use the content of the visual as your notes.

Audience Analysis (“Know Your Audience”)

Just as with a written report, think about the different backgrounds and needs of your audience. Will they get the right message and make the right decisions?

Question and Answer

Admit it when you do not know the answer. Most people only ask a question because they do not know the answer, either. Try to be responsive, not evasive. And prepare for Q & A by imagining the questions that will be asked.

Post Mortem

After the presentation, go with your colleagues to a less-tense room and get feedback immediately. Ask your colleagues what you could have done better. If they tell you that you were perfect, tell them that they are not being very helpful. Demand criticism! This is the best time to find out what you did right and what you did wrong. If you wait more than about an hour, the feedback will not be detailed enough to help you.