Planning and Organizing the Seminar

• Determine who your audience is and the purpose of the seminar

This might sound obvious and, perhaps, even trivial, but it is something that people often overlook. Would you give the same seminar on new concepts in food packaging to a group of food scientists that you would to a consumer group? Would you give the same seminar on your research involving a new cancer therapy to a group of sales representatives that you would to your laboratory group? The underlying point here is that the seminar is a tool by which information is conveyed; you are using that tool. As with most things, the right tool is needed to most efficiently accomplish a task. Keep in mind that you may be dealing with a “non-expert” audience that is not as familiar with the area as you are. Therefore, it is important from the outset to recognize who the audience is and what you are trying to accomplish.

• Sketch out your last slide before making any others.

This may sound backwards but it actually forces you to consider a very important point: what are the major take-home concepts and messages you want your audience to understand at the end of the seminar. Ideally, you should use those key concepts to build the rest of the seminar. Too often, presenters put so much effort into providing background material that there is either little time left to deliver the really important stuff.
• **Utilize an outline to organize your thoughts.**

Once you have a reasonable idea of the major concepts you want to convey, it’s time to get down to business. One of the greatest challenges in the beginning stages of seminar development is trying to decide how to start and what to include. Here is a simple process that may help:

Get a piece of paper and start at the beginning: put down a title.

Then simply write down items related to the seminar; these might include different pieces of background information, specific results you want to discuss, major conclusions, etc. The aim, at this point, is simply to write them down as they come to you.

Then, take these fragmented pieces and sketch out a rough outline of the seminar on another piece of paper. Use the “Roman numeral” method (i.e., I, II, A, B, etc.); it really does work. *And* use a pencil, since nothing is set in stone at this point. Alternatively, this step can be done in a word processing program using an “outline view” function.

Now get a stack of 3x5 index cards and use these as ‘dummy slides’. Using your outline, start at the beginning and make a title slide. Again, various computer programs (e.g., PowerPoint) can be used to make ‘virtual’ slides.

Then, design a preliminary slide for each of the related elements that are listed in your outline. If you plan on using bullet statements on a particular slide, list them. If you will use a figure, crudely sketch it. You also may want to list on the back of each card the major points that you plan on emphasizing with that particular slide. Make sure you number (in pencil) the slides as you go along to keep track of them.

Once you have the stack completed, lay them out in numbered order and start rearranging them until you are completely comfortable with the flow (see next section). You will also have to re-design slides that contain too little or (much more likely) too much information.
• **Develop smooth transitions from lone slide to the next.**

One of the most consistent problems that many seminar speakers have is developing and making effective transitions between one slide and the next. One of the key points here is that you should be relating the various slides and different sections in a seamless and contextual fashion. If not, one ends up with a disjointed series of statements, facts, and observations. Developing effective transitions can be a difficult process since not all slides lend themselves to easy transitions. Step back and see if you can come up with a statement that relates one slide to the next one. This might, for example, involve a summary statement for the slide that then flows into the next slide. Keep the following in mind: the seminar should be like a *logical story*, with one piece being supported by all of the previous ones. Another way of describing it is like presentation of evidence in a court case. *The transition statement is the glue that ties together the various elements of the story or the case.* Take time to develop good, solid transitions.

• **Utilize mini-conclusion slides, if appropriate.**

Ideally, all seminars should flow without interruption to a logical conclusion. However, some seminars, due to their length or the nature and complexity of the material, benefit from occasional summaries that help give the audience a quick review of a major section. This can be especially helpful if you are presenting several different (but related) sets of results or concepts.

• **Reorganize the time limitation of the seminar.**

At first, your may feel that it will be difficult to create enough slides for a 25 min presentation. However, it is easy to fall in the trap of trying to cram everything about a given subject into a short presentation. If you find yourself working with 45 or 50 slides, then you have too many slides and possibly too much information. As a general rule of thumb, figure that each slide will take 45 to 90 sec to present. Obviously, some slides will take only a few seconds while others require considerable more time. Based on this guideline, you probably should not have more than 30 to 40 slides for a 30 minute seminar.

• **Summarize the important points of the seminar.**

A good seminar can be made even better through the use of effective slides at the end that summarize the most important concepts and implications. *Remember that the audience will most likely remember the last few slides you show them; therefore, you should put considerable thought into these slides.*
Slide Layout and Organization

• Keep in mind the first three rules of slide design

*Keep it simple, continue to keep it simple, and finally, make sure you keep it simple.* By the time you present your seminar, you will have seen each slide dozens of times. But remember that no one in the audience (except perhaps your advisor or a few friends) will have ever seen your slides and they will have only seconds to digest the information on the screen, while at the same time trying to listen to you. Your audience does *not* have the same luxury and you need to be aware of this. Therefore, the more simple a slide, the more effective it will be.

• Keep in mind the next three rules of slide design

*Make it big, check the size, and make it bigger.* Slide design is usually done on a computer monitor and it is very easy to forget that slides are usually projected onto a screen in a room that may be very large. Most slide creation software does have features that allow one to simulate a screen presentation but this is usually a poor substitute for the real thing. Therefore, it is important to use reasonably large font sizes and graphics. Keep in mind that some of the audience members may not have perfect eyesight. If possible (and this is very easy with computer technology), project and check a few of your slides as you design them to get an idea of what works and what does not.

• Make use of blank space.

Simply put, a slide that is completely filled with information, whether that be text or graphics, is usually hard to read and comprehend. This can be true even if one uses large fonts. It is better to include fewer elements on the slide and thus have more blank space between the elements. This is easier on the eye and makes for better comprehension on the part of the viewer. Make sure you include adequate space between lines of text.

• Choose an appropriate background color.

Not too many years ago, there was not much of a choice when it came to background colors. White, black, or dark blue were most often used and these usually worked well. However, with the advent of computer graphic programs, it is now possible to use any imaginable color or pattern as a background. But that does not mean that they should be used. Avoid using certain colors (e.g., red, green, yellow, and many others) or complicated patterns as the background. You might think that it looks “neat” to use a particular shaded pattern but be guaranteed that after even a few slides, some of our audience will be wishing for plain black and white slides. The purpose of your seminar is not to impress the audience with your computer graphic abilities. Keep in mind that you are trying to convey information and concepts about a particular subject. You do not want to distract the audience from your message by the use of inappropriate backgrounds.
• **Choose appropriate text and graphic colors.**

Nearly as important as the background color is the color(s) and size used for text and graphic elements (symbols, lines, etc.). Be very careful in choosing these elements since it can be very hard to distinguish certain colors, shapes, and sizes once projected onto a large screen. Make sure that foreground and background have a large contrast in intensity, not just color. So, for example, a grayscale printout should be as readable as the slide is meant to be. Remember that some are color-blind (so never use neutral red on blue), and those who see a full spectrum nevertheless have difficulties with certain color combinations (so never use red on blue). A nice trick, to ensure there is adequate contrast, is to use the Shadow style of text when you have a dark colored background.

• **Avoid including extraneous material.**

One temptation when constructing slides is to simply copy or scan a pre-made figure or table. This is permissible as long as proper credit is made (see below), as long as you discuss everything that is included on the table or figure (that is, it is simple enough for a seminar), and as long as the scanned image is extremely clear and readable. However, such an approach will almost always lead to unsatisfactory results. Lettering sizes in books and papers will usually be too small for a slide, and books and papers almost always put much more information in one graphic than should be in a slide. This is due to the fundamentally different needs and strategies: a presentation provides the information in measured amounts and precisely arranged order; whereas a printed work needs to maximize use of space and is made to be skimmed, read, leafed through, and reread at the audience’s leisure.

An extremely common mistake in presentation is to display a complex graphic when the speaker only discusses a very small fraction of the material shown. This practice results in poor slides, is very distracting, and simply makes for a poor presentation. In summary, simply make it your habit to construct for your slide a new figure or table that suits the needs of the particular seminar. For instance, suppose you have a line graph in your thesis that includes 8 treatments but in your job seminar you plan on discussing only 3 of those treatments. The presentation will be much more effective if a new slide is made that only includes those treatments you plan to discuss. Often, you can even generate separate slides to discuss each treatment (in comparison to the control), and show these slides in succession.

• **Include all titles on slides.**

This is a debatable point, but slides can look a lot more consistent if each one has a brief, descriptive title. This will help clue the audience at the beginning into what the slide is all about.
• **Give credit where credit is due.**

Unless the information on a particular slide is strictly generated by you, it is important to give appropriate credit; this can take the form of a small footnote. This does not mean that everything in your presentation needs to be footnoted; generally accepted, well-known facts usually are not footnoted. However, specific experimental results or specific interpretations of results should be credited to the appropriate person(s). When in doubt, footnote. This also applies to material gathered from websites.

A general word about information from the web/internet--keep in mind that most materials on the web is not closely reviewed for accuracy. While the information may be from a reputable source, you should not assume that it has undergone a detailed review.

• **Be consistent in design layout.**

One of the most distracting things can be a set of slides that uses different backgrounds, different font sizes, different color schemes, etc. The most professional and effective slides are those that have consistent layout schemes.

• **Use appropriate symbols.**

Computer-created graphics are easy to make and the variety of symbol choices is vast. However, not all symbols look good on a large screen nor do all symbols look good with certain color combinations. Make sure that the symbols you choose are distinct; some “circles” can look like squares when projected on a screen. The basic message, once again, it to review your slides before finalizing them.
**Presentation Style and Mechanics**

- **Make eye contact with the audience.**

  While the seminar is supposed to be a way to transfer information, there is the human element that obviously needs to be considered. It is important to establish eye contact with the audience; this projects a more personal presentation and also imparts a level of confidence on your part. Facing and looking at the audience also is important in terms of your voice (see next point).

- **Talk to the audience, not the screen.**

  Although a slide seminar is largely a visually based event, information is also being conveyed by your voice. That information transfer is not effective if the audience cannot hear you. One of the mistakes that many novice speakers fall into is “talking to the screen;” this is a natural tendency, especially for persons not used to public speaking or those not familiar with their presentations (i.e., using the slides as a speaking “crutch”). This habit, while understandable, makes it more difficult for the audience to understand you and this leads to a less effective seminar.

- **Effectively use pointing aids.**

  There are many things one can use as a pointer: your finger, a yardstick, a laser, even mouse-driven screen arrows. However, a few key points pertain to the use of any of these aids. It is important to point to the item you are discussing. This may sound obvious but it is surprising how many speakers actually point to something other than what they are supposed to. Related to this, point exactly to the item rather than using broad sweeping gestures. Do not dwell with the pointer too long; this reduces the effectiveness of the aid, which should be to direct and enhance the attention of the audience. Turn off laser pointer when not using it; one of the most distracting (and amusing) situations is a person gesturing with a laser pointer without knowing it is on (the room can look like a laser light show). This problem is not necessarily limited to laser pointers: a professor who, getting overly enthusiastic about how corn grows, dropped a 6-foot wooden pointer on a student in the front row.

- **Pace yourself.**

  A good set of slides can be ruined by someone rushing though them. As you develop the seminar, make slides and perform practice runs; keep in mind the time limitations. It is better to have fewer slides and a deliberate pace than to have a large number of slides that one has to rush through. Talk more slowly than you do in conversation. Generally that is about 60-70% of conversational speed for optimal communication in a seminar setting (yes, they really do research on this kind of thing). The rule is that it should take 2 minutes to read the ca. 250 words typewritten, double spaced on one side of a U.S. letter sized page.