

How To Present A Successful Seminar

This booklet is significantly copied from a handout by Dr. Wayne Parrot in the Department of Crop and Soil Sciences at the University of Georgia for their Advanced Agronomy Seminar series. Special thanks go to him for sharing these materials.

This handout contains a series of comments, hints, and suggestions that will allow you to give a quality seminar. As you read and study it, you will notice that most everything in here is just plain common sense. It's just that these pointers are not necessarily obvious to a person without much practice in giving seminars. In addition to studying this handout and following its instructions, pay special attention to seminar speakers every time you go to one-- several seminars are given on campus each week. Pay attention to the details. What specifically did the speaker do that you liked? What did the speaker do that did not work well? Take mental note of these, and eventually you will accumulate the necessary experience to consistently give excellent seminars.

STEP 1: Selecting the topic

The current format of selecting a general theme was adopted in an attempt to increase the relevance and value of seminars to the students and their audience. This format permits the semester to have a certain cohesiveness, while permitting each student to select a topic that is of personal interest.

† *Be somewhat familiar/interested in the topic.* That way the student can understand it sufficiently to present to an audience.

† *The topic must not be one that the student is currently or has done research in.* One of the purposes of seminar is to broaden the topics with which the student is familiar, and this is not accomplished by presenting a seminar on a topic the student already knows about. Besides, those students who go into teaching must learn to present topics outside of their immediate research every time they give a lecture.

† *The topic must be covered comprehensively within the allotted time period (35-40 minutes).* This may mean that the topic may have to be narrowed down in order to do the topic justice. If the topic is too broad, then the speaker will be able to only provide a very superficial coverage. If the topic is too narrow, the speaker won't speak for the required amount of time. Overall, mastering the length of time one speaks can be very difficult. Yet nothing is more annoying at a meeting than a speaker who cannot stay on time. Therefore, students in 8100 are expected to pay particular attention to their timing. Students should also note from the grading sheet, provided later in this packet, that those who fall outside of the 35-45 minute speaking window will lose points accordingly.

Remember that the audience will range from people totally unfamiliar with the topic to those who know the topic very well. This is especially true during a job interview. The trick is to present the material in such a way that those unfamiliar with the material will understand it, while presenting sufficient information in enough detail that those familiar with the topic will know that the speaker is an expert in the area. On occasion, it may be permissible to lose some

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of the audience in order to convince the experts that the speaker really knows the subject matter.

STEP 2: Choosing the format



IN THIS SECTION, YOU WILL:

- ⊕ Decide exactly what you have in mind
- ⊕ Decide how to approach the topic
- ⊕ Decide how to organize your talk

1. How you make the presentation is affected by what the speaker expects the audience to learn and by the attitude of the audience

"First determine your purpose, then develop the message" (Kodak Publication No. S-31). This is especially true in teaching situations. **"Understand your subject and your audience.** The people you are trying to reach should determine the form and style your presentation should take. Are they conservative, radical, happy-go-lucky, fixated on the bottom line? *What's your purpose? What's your goal? Who's your audience? Know where you're going before you take off.*" (Edelhart and Ellison, 1989). A worksheet has been provided in the back of this packet. Fill it out before proceeding further to help answer the questions raised in the previous paragraph.

Once the audience and its motivations for listening have been characterized, determine (Kodak Publication No. S-31 (1994)):

-  The "appeal"-- the aspect of the seminar that will motivate audiences to come listen
-  The "slant" or perspective of the seminar which is necessary to engage the interest of the audience

After filling out the worksheet, and answering the above questions, answer the following questions, which have been taken verbatim from the Kodak Publication No. S-31 (1994):

1. "After viewing my presentation, I want my audience to:

2. State the message in a in a noun-verb-object format NOT TO EXCEED 6 WORDS:

If you use less than 3 or more than 6 words, you haven't given it enough thought. Here are some examples:

- GIS is useful to soil scientists
- Biotechnology makes better tomatoes
- The nature of farming is changing
- Cropping practices save soil

2. A structure is required to provide a smooth, orderly, and complete guide for preparation and presentation

Outlines are the blue prints of the planned presentation. They should include lists of items needed and administrative details, as well as the major components of the presentation. If prepared properly, the outline can serve as notes during the presentation.

‡ Consider alternatives to the standard outline (i.e., hierarchical sequence of topics). A tree (i.e., subtopics revolving around a central theme) organization can be very effective for some topics, as can a circular scheme (start with a question or a premise, then use the seminar to answer the question or address the premise)

‡ Use of an outline (or tree) throughout the talk, with the appropriate section highlighted, can help focus attention and maintain organization over a period of 40 minutes. It can also help recover members of the audience who got lost during the previous topic


‡ The idea of "building" a concept is suggested by Fryer, 1991. While Fryer was referring to a particular concept, this technique can also be very effective for outlines:


"If you're using three or four slides to explain a concept, reveal the title slide first; on the next slide, show the title along with the first supporting point. On the following slide, display the first and second points, highlighting the latter, and so on. Building the concept makes it easy for the audience to absorb."

3. The seminar must have a beginning and an end

‡ The introduction mentally prepares the speaker to make an oral presentation, and prepares the audience to receive the presentation. Speakers prepare the audience by providing them with the objectives of the presentation. These objectives should be attainable, specifically defined, and permit the audience to understand what they are to learn.

‡ The summary or conclusions prepare the speaker and the audience for the end of the seminar. Otherwise, audiences are just left hanging, wondering if the seminar has ended. The conclusions should summarize the seminar. A slide with the title "Conclusions" or "Summary" provides a clear signal that the seminar is coming to an end:

 Conclusions are new concepts or insights derived from the material presented during the seminar

 Summaries are a repetition of the main points of a seminar, presented in a clear, concise, and direct manner

STEP 3: Show, don't tell

IN THIS SECTION, YOU WILL:

- ⊕ Determine the value of visual aids
- ⊕ Determine the types of visual aids available
- ⊕ Identify & select the most appropriate visuals for your seminar

1. "Visuals represent the credibility of your presentation, reinforcing your spoken words"

(Edelhart and Ellison, 1989). Visuals help by:

- † Intensifying impressions and accelerating the audience's comprehension
- † Providing experiences outside the audience's environment
- † Preventing verbalism and saving time by giving definite meaning to words
- † Arousing interest by attracting attention

2. Visuals double as note cards




The use of note cards or cue cards is not permitted during the seminar.

Consequently, each slide must double as a cue card. "Pick words or figures within each slide to remind you of specific points (you wish to say during the seminar)." (Edelhart and Ellison, 1989).



3. Types of visuals

Not all slides should be word slides. Graphs, photographs, and diagrams are better at getting a point across than words are. They also break the monotony of word slides. A photograph or diagram is literally "worth a 1000 words", while graphed data is much easier to understand. Numbers are boring, difficult to interpret, and hard to see on screen.



† Use verbal visuals (i.e., word slides) when:

-  Presenting ideas that cannot be visualized
-  Emphasizing ideas or concepts to be remembered
-  The message involves a few major points

† Use the real thing when:

-  It is available
-  It is unusual or interesting enough to attract or maintain attention

† Use graphs, maps, or flow charts to:

-  Show organization, flow, percentages, changes over time, trends, or projections
-  Facilitate the explanation of a procedure

† Use drawings when:

- ✎ A diagram facilitates an explanation
- ✎ Leaving out detail emphasizes that which is shown
- ✎ Photos or the real item are not available
- ✎ Inside or cross-section views are needed

† Use photographs when:

- ✎ A photo is more descriptive than words
- ✎ Showing clarity of detail
- ✎ Showing a step-by-step process
- ✎ Comparing past and present, good and bad, or conditions someplace else

† ***Use data to support each and every point made during the seminar.*** *Scientists rely on numerical data to support each statement. Consequently, seminars without appropriate data lack depth and credibility, and will be graded accordingly.*

4. Where to get visuals

- † Chances are there will be an expert on campus that has lots of material. Most people are glad to share their resources with others interested in topics of their interest
- † If there is no expert on campus, there will be one elsewhere in the country. Call or write them. Introduce yourself, and ask for pertinent slides or information. Again, most people will be glad to help
- † Books and journals are a wonderful source of diagrams and photographs. Photographs can be scanned in with the Departmental scanner, edited, and imported into slides you are making. Diagrams are best redrawn in the slide-making software, as they do not scan well
- † Photograph objects (roads, trees, foods, people, equipment, plants, etc.) yourself
- † Drawings, maps, and pictures available on CD-ROM or the World Wide Web
- † Make your own drawings using a drawing program

STEP 4: Designing the Slides

IN THIS SECTION, YOU WILL:

- ⊕ Determine the number of slides to use
- ⊕ Determine what each slide will say or contain
- ⊕ Determine how each slide will say it or contain it
- ⊕ Assemble the slides into the proper sequence for your seminar

The rule of thumb here is to "Let your pictures do the 'talking' as much as possible; when pictures can't say what must be said, use narration." Kodak, 1994

1. Individual speakers have a specific number of slides they cover per minute

Most speakers have a 1½ or 2 slide per minute rate, and first-time seminar givers should probably shoot for such a number. Speakers who use fewer slides probably have put too much information on each slide. Keep track of the number of slides you use in each seminar you give, and the amount of time used to present the seminar, and after a couple of seminars, you will have your own individual "slides per minute" ratio.

2. Make a draft of each slide, using the attached slide planning sheets

By this point, you should know exactly which slides you need to make. Some slides [the title, the outline, and the conclusions] are self-evident. You should also have a good idea of the information each remaining slide should have.

- ⊕ Make several copies of the enclosed slide-planning sheet, and cut out several of the slide mockups
- ⊕ Determine the key points you'll make to support your assertion (Kodak, 1994)
- ⊕ Determine the key point for each individual slide (subject-verb-object)
- ⊕ Start by writing in individual slide sheets what each slide will say on it (the title is an easy place to start). Make hand drawings of the photos, diagrams, etc. that will be used. Space is provided on the right hand side of the slide sheet to write comments to yourself about what each slide is to remind you to say.
- ⊕ As each slide is prepared, remember that it must double as a note card, so "reminders" of what to say must be built into each slide

3. Remember the following points while designing each slide:

✚ Slides must not be self-explanatory

"All slides should require the presence of a lecturer and not be completely comprehensible on their own. There should always be a partnership between the image on the screen, the lecturer, and the course of the audience. This interaction can be broken by illegible slides, or by an audience reading a slide while the lecturer boringly repeats the same words as if it were a kindergarten.

"So-called word slides are best used in one of two ways. They can either be used as signposts to remind the audience of the topics that the lecturer is dealing with, or they can be used to emphasize certain points. If they are used for emphasis, they should never make sense on their own. They are more effective (i.e. memorable) if they are like cryptograms, requiring codes supplied by the lecturer for their understanding." (Simmonds and Reynolds, 1989).

Selecting herbicide resistant crops based on broad acre selection procedures.

Possible reasons why susceptible individuals survive herbicide application under field conditions

- I. Unevenness of spray application - because of drift, imperfect nozzle spacing or height, asymmetrical nozzles, and so on.
- II. Unevenness in soil conditions - leading to greater vigor and thus more survival in one area than another.
- III. Inadequate mortality - because the calculations of the rate at which to apply the herbicide were based on inadequate premises, or because of unpredictable climatic events (e.g., rain) after spraying.
- IV. Avoidance of the herbicide. (e.g., by delayed germination).
- V. Protection of plants by neighbors or weeds from foliar application, or by stones or deep sowing from preemergence applications.
- VI. Differential interception of spray because of varying orientations of leaves at spraying.

REASONS WHY SUSCEPTIBLE PLANTS SURVIVE
HERBICIDE APPLICATION

1. Uneven spray application
2. Uneven soil conditions
3. Rate of application
4. Avoidance
5. Shading
6. Leaf orientation

The above two examples illustrate the point (from Heap et al, 1994).

This is probably the single most important point for seminar givers.
The audience must be completely dependent on the speaker to understand the content of the slides. The moment the slides are self-explanatory, the audience no longer has any need for the speaker. The audience becomes bored, distracted, even frustrated, tunes out the speaker, and loses interest in the seminar.

✚ Use only ONE thought per slide (Anonymous, 1988)

Determine the main point you are trying to get across is, then get it across. Speakers who have not figured out what the main point of the slide is will convey a sense of vagueness and confusion to the audience. Ensure you can convey the message for the slide using only 3-6 words (subject-verb-object)

‡ Keep everything simple

A person's ability to assimilate the spoken word is only about 60% of the ability to assimilate the written word. For this reason, keep everything simple. Do not use words like "anthropogenic" when "synthetic" or "man made" will do. ONE COMMON MISTAKE IS THAT PEOPLE TRY TO PRESENT THE SAME AMOUNT OF DETAIL IN AN ORAL PRESENTATION AS WOULD BE PRESENTED IN A PUBLISHED PAPER. BE SELECTIVE ABOUT WHAT YOU PRESENT. SELECT REPRESENTATIVE DATA, but don't present so few data that no points can be demonstrated.

The effect of fungicides and cerone on septoria yields in three varieties of winter wheat.

Treatment	Variety		
	Hill 81	Malcolm	Stephens
Check	135.6a	140.1b	142.3b
Cerone	130.2c	129.7c	140.0b
Tilt	134.0ab	163.5a	158.1a
Tilt + Cerone	133.5abc	159.9a	156.8a
LSD (0.5)	3.4	8.5	4.3

CERONE AND FUNGICIDES FOR SEPTORIA ON WHEAT

	Hill 81	Malcolm	Stephens
Check	136	140	142
Cerone	130	130	140
Tilt	134	164	158
Tilt + Cerone	133	160	156

The above two examples illustrate the point (from Heap et al, 1994).

‡ Do not clutter the slide

As a rule of thumb, have no more than a maximum of 6 lines per slide, and 10 words per line (Fryer, 1991). Use a maximum of 4 columns and 3 rows of data (Anonymous, 1988). **Slides must be legible!** If you cannot hold a slide 12 inches from your face and read it easily, it will not project well. "A speaker will not need to apologize to those in the back who may not be able to read the labels. Every presentation will be designed for the back row." (Kolowich, 1992)

‡ Give proper credit

If you use published anything--thoughts, conclusions, tables, graphs, etc., give appropriate credit on the slide itself (e.g., Smith et al., 1980). This is no different than if you were writing a term paper or journal article. *Failure to give appropriate credit is called "plagiarism".*

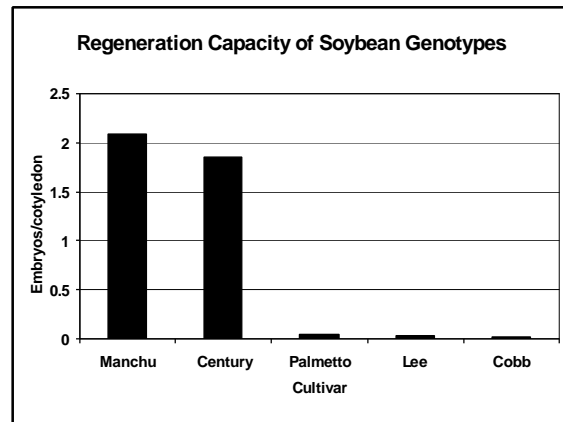
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† Use graphics rather than tables

Because numbers are boring, and hard to interpret, graphics will give you more visual impact than tables. Below are the same data presented in two different formats:

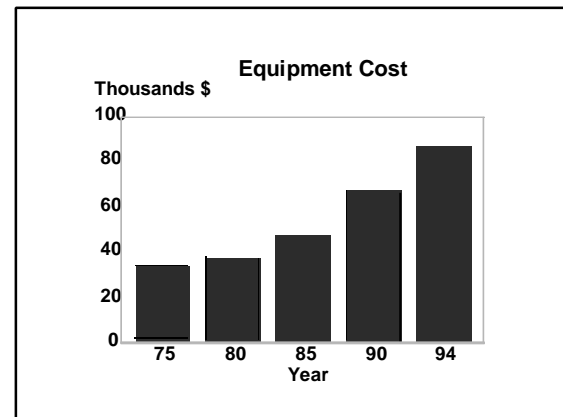
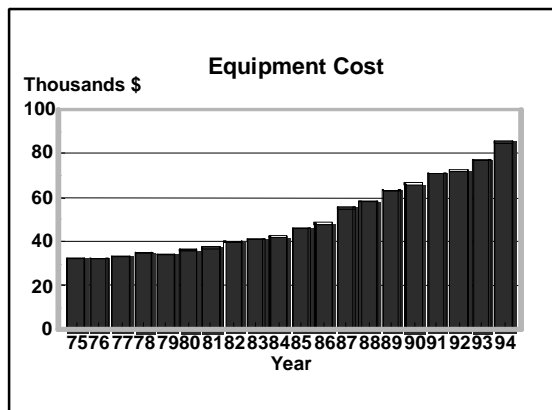
Regeneration capacity of soybean genotypes

Cultivar	No. embryos/cotyledon
Manchu	2.09
Century	1.85
Palmetto	0.05
Lee	0.03
Cobb	0.02



† Select the correct type of graph

Use bar charts for comparisons, line charts for trends, pie charts for percentages." (Edelhart and Ellison, 1990). Line charts cannot be used for non-continuous variables. ENSURE EVERYTHING IS PROPERLY LABELED.



† Do not number tables, figures, and graphs

(E.g., Table 1, Figure 3) If you decide to alter the order of your slides after you have made them, you are faced with the alternative of either making a new slide or presenting the slides out of their numerical sequence. The audience can really be thrown off if Table 4 shows up and they haven't seen Table 3 yet. Furthermore, this gives you the flexibility to reuse the same slides in future seminars.

† Avoid clip art

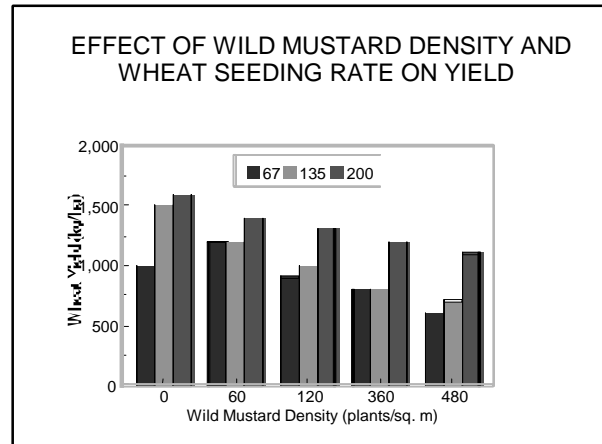
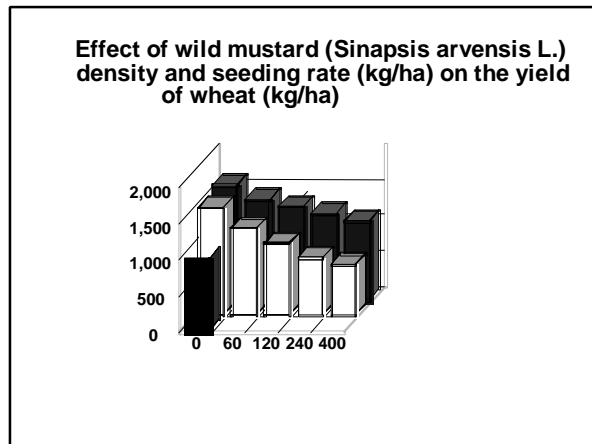
You must avoid the temptation to use *Time/Newsweek/USA Today*-type graphs. These magazines have become very fond of using pictorial graphs (e.g., different sized cows to present beef production per state; stacked loaves of bread to present wheat acreage, etc). Such graphs are not adequate for a professional setting, but consider using them if you are ever invited to speak before a group of non-scientists.

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† Do not use 3-D graphs for 2-D data

These graphs are an invention of current computer capacity, and have a certain aesthetic appeal. However, 3-D graphs distort data and are frequently difficult to interpret. Their use is already prohibited in ASA-CSSA-SSSA publications, and is not appropriate for seminars.



The previous two examples illustrate the point (from Heap et al, 1994). Notice also that the caption has been simplified (Keep everything simple!)

† Be selective about the data you present (Kodak, 1994)

This goes along with keeping everything simple and not cluttering the slide. The above two examples illustrate the point. Notice that the entire data set is not necessary to get the message across. If anything, the entire data set can serve to provide clutter, thus obscuring the issue (from Heap et al, 1994).

4. Assemble the seminar

† Arrange the slide mockups on a large table in front of you, and try going through your talk

† Shuffle the slides around until your talk flows smoothly

† Modify the information on each slide as necessary to make your talk flow. You will have to insert new slides, delete some, and modify the content of others. Keep the following pointers (Kodak, 1994) in mind:

- ✎ build the concept
- ✎ move from the least important ideas to the most important ones
- ✎ move from the most familiar ideas to those that are less familiar
- ✎ start with simple ideas and move to the more complex ideas
- ✎ start with ideas the viewer understands, then build on them
- ✎ start with ideas that the audience will readily accept, and then move to those that they are more reluctant to accept

† **"REPEAT THE PROCESS UNTIL YOU CAN'T THINK OF ANY WAY TO IMPROVE THE STRUCTURE OR THE POINTS YOU ARE MAKING ON EACH PAGE. ONLY AT THIS POINT WILL YOU BE READY TO CREATE ACTUAL IMAGES"** (Edelhart and Ellison, 1987)

STEP 5: Sitting at the computer

IN THIS SECTION, YOU WILL:

- ✦ Receive pointers on computerized slide design
- ✦ Select appropriate software

1. Provide a consistent look and feel

Successful seminar speakers create expectations from the audience. The audience "gets a rhythm", and has certain expectations about the look and content of the next slide. In essence, the style of the slide fades into the background, and permits the audience to focus on the presentation. If the next slide is different from what is expected, the audience loses its rhythm and becomes distracted, paying more attention to the composition of the slide than the content of the slide. This detracts from the overall presentation.

Once you have selected a certain style that you like and fits your personality, stick to it. This will permit you to "mix and match" slides from different seminars without major effort. In this day and age, computer programs have premade "style" sheets that are practical and easy to use.

✦ Use the same background color for all slides

"Create consistent images. When it comes to presentations, consistency and simplicity must prevail. Your purpose is not to overwhelm your audience with graphics but to achieve your real-world goal. Use color combinations as visual cues, but use them uniformly. Don't distract your audience by jumping from blue to black to green backgrounds. Blue works best as a background for slides because it is soft on the eye and emotionally neutral. Other colors have very strong associations, such as red for Christmas. Keep in mind that color must be chosen to serve the report, not to satisfy a personal preference. Whatever decisions you make about the look of your images, apply them throughout your presentation. *Consistency and simplicity rule.* Use special effects at your own risk. *Don't create a multimedia extravaganza. Be selective.*" (Edelhart and Ellison, 1989).

✦ Avoid Scanning-in published tables or diagrams

The style will not match that of the rest of the presentation, there may have a lot of extraneous information not relevant to your seminar (in which case one is better off abstracting the appropriate data into a new table), and/or the data may be better grasped as a graph. Retype the information or redraw the diagram in the computer program you are using. Remember to give appropriate credit to the author(s). Diagrams can be scanned into your presentation, thus allowing them to have the same style as the rest of the presentation.

✦ Be consistent with the use of capital and lower case letters

One of the most common mistakes is for students to have some titles with all lower case letters, and others where the first letter of each word is capitalized. Select one style, and use it throughout the entire presentation.

✦ Be consistent with bullets, fonts, & hierarchical styles

2. Use color correctly

"Color will be used to contrast, highlight, or symbolize, not merely to decorate." (Kolowich, 1992). According to *A guide to using color*, color, used correctly, can:

- † Highlight primary points, permitting the audience to focus on what's important while background information remains in the background, as in an outline. "Use *less* color -- not more. By limiting your use of color, you maximize its impact."
- † Enhance the visual continuity of the presentation materials, establish patterns, and set expectations
- † **Use color to explain, not decorate.** Color can be used to group similar items (e.g., countries on a map) or concepts, and to establish correlations. "If you are trying to establish a relationship between color and meaning, minimize the number of colors you use."
- † Presentation software comes with many preset color/background combinations that work well together. If you alter these, keep the following points in mind:
 - ✎ Select one color from the color wheel, and then change the hue to obtain variety without losing the cohesiveness of the presentation
 - ✎ Avoid complementary colors (i.e., opposite each other on a color wheel, such as red and green, yellow and purple, orange and blue). These combinations are difficult for the eye to focus, and thus appear to vibrate
 - ✎ Select colors adjacent to each other on a color wheel for harmony.
 - ✎ For contrast, use colors that are separated by 3 other colors in the wheel. Use the darker color in the background
 - ✎ If you use light colors, choose the darker intensities; light intensities can appear faded or washed out
 - ✎ "Use a darker background behind light colors to increase contrast and make light colors more visible."
 - ✎ As you select colors, remember that black and white count as colors too!

3. Additional notes on slide design:

† Check spelling/grammar

Spelling and grammatical errors stand out when projected on the screen. *If you are not a native speaker, it is especially important that a native speaker check your seminar for spelling or grammatical errors.* Current software packages include spell checkers. However, never trust a spell checker, as spell checkers don't catch misspelled words when the misspelling changes the meaning of the word, e.g., *medicated* instead of *mediated*; *from* instead of *form*.

‡ Watch the justification

**Agronomy is the
science that feeds
the whole world**

Left justification

**Agronomy is the
science that feeds
the whole world**

Left justification

Do not justify text if it will leave wide gaps between words. Such gaps are unsightly and make the slide difficult to read, as is evident from the examples above.

‡ Make effective use of the space available on each slide

Don't have a small word or title centered on the slide--use a larger font and split a single line into 2 or 3. The following examples illustrate the point:

Agronomy for the 21st century

Improper use of space

**Agronomy
for the 21st
century**

Better use of space

4. The final check

Read the now classic "The art of not giving a paper." It was abstracted from the *Journal of Irreproducible Results* (1977) 23:9, and appeared in *HortScience* (1977) 12:438. If **anything** in this article reminds you of your seminar, go back to the first page, and begin the process again.

"Organizations are requesting prospective speakers to submit abstracts of their paper for acceptance earlier and earlier before their meetings. It often becomes necessary to seek acceptance of a paper before the actual work is accomplished. Frequently the paper is accepted but the proposed work is not started, is incomplete, or contains results at variance with the published abstract and thus not worth speaking about. The speaker nonetheless has a given time slot at the meeting and is forced to appear before the group and not present his paper. It seemed appropriate to review the numerous techniques available to speakers caught in such a predicament.

"1) Where no work has been done and no information at all can be conveyed, the simplest solution is making a slide that says 'In Summary' and place it upside down and backwards as the first slide. A 10-minute stall can easily be arranged consisting of a discussion between the speaker and the projectionist as to how to find and orient this slide. If a longer talk is necessary, the second slide should be made with thick glass coating that will jam the projector.

"2) Have a the paper presented by a foreign visitor to the department who speaks English with a quaint, but unintelligible accent.

"3) Fumble with the microphone. (Speak in a whisper several feet away from the microphone, create a deafening screech by putting the microphone to your lips, or when all else fails kick out the plug.)

"4) Consume the first part of the talk with a droll anecdote, and involved summary of other people's work, and when the signal to conclude is given, race rapidly through your non-presentation so that it comes out unintelligible.

"Numerous techniques are available for non presentation of slides.

"1) Use slides with yellow printing on an orange background; navy blue on black combinations are equally unintelligible.

"2) Reduce 5 pages of data and graphs to one 35 mm slide and combine with the statement: "The results on this slide speak for themselves."

"3) Divert attention. Slides can be made of material calculated to ignite after a prescribed number of seconds of being shown and audience attention invariably will be focussed on the slowly darkening and subsequent burning areas. Simple trapping of moisture within glass slides will cause endless fascinating patterns of movement in the condensed water droplets which will successfully draw attention away from the non-data." (Anonymous, 1977)

STEP 6 Preparing the abstract

☹ Students should submit their abstract well before the seminar. 🖨

‡ An abstract, by definition, IS A BRIEF BUT COMPLETE SUMMARY OF THE ENTIRE SEMINAR. Consequently, phrases such as "will be discussed", are not acceptable, and must be avoided.

☹ Phrases such as "... will be discussed" are not permitted in an abstract. 🖨

‡ All references (at least the main ones) cited during the seminar must be listed on the abstract

‡ The abstract must also include the speaker's name, and the date, time and place of the seminar

STEP 7: Giving the seminar itself

IN THIS SECTION, YOU WILL:

- ‡ Receive pointers to adequately practice your seminar
- ‡ Receive tips on oral presentation

1. Practice

Seminars that have not been practiced sufficiently are painfully evident. However, do not over-practice to the point you will lose some of your enthusiasm for your talk.

‡ Scheduling

Aside from practices on your own or with other students, first-time seminar students must present a practice seminar a week ahead of time. The reason is that new slides will always have to be made after the practice session. You will still need time to make new slides and practice the modified seminar!

‡ The final checklists

After your practices, fill out (or have a friend fill out) the checklist below. This is a copy of the form used to grade students for the actual seminar. Also read, **How Real Scientists give talks**, by Jay. D. Mann, which appeared in *ASHS Newsletter* (1991) 7:2. If any part of the checklist does not receive 5 points, or if any part of Mann's article reminds you of your seminar, go back to the first page, and correct all deficiencies.

Points: 5 = excellent; 0 = not acceptable	Points
ORGANIZATION	
The speaker told us what s/he was going to tell us in the introduction, and the speaker ended by summarizing what s/he covered and concluded during the seminar	
The presentation had a logical organization	
An outline was used effectively throughout the talk	
Every slide served a purpose- there were no unnecessary slides	
CONTENT	
The topic was covered in sufficient depth	
Enough data were presented to support the speaker's premise	
The supporting data presented were relevant to point being made	
The material was presented at a technical level suitable for the audience	
SLIDE COMPOSITION	
The visual aids were clear and easily understood	
Slides were free of spelling and grammatical mistakes (0 mistakes =5 pts; 1=4 pts; 2=3 pts; 3=2 pts; 4=1pt; ∞5=0 pts)	
Background, upper/lower case letters, and other format details were used with consistency, such that every slide helped give the presentation a consistent feel and style (0 inconsistencies =5 pts; 1=4 pts; 2=3 pts; 3=2 pts; 4=1pt; ∞5=0 pts)	
DELIVERY	
Adequate eye contact with the audience was maintained	
The delivery was given in complete sentences	
The delivery spontaneous and enthusiastic	
The speaker did not engage in distracting mannerisms	
The speaker did not give the audience an excuse to get distracted	
Delivery time: (∞ 30 minutes = 0; 31-34 = 3; 35-40 = 5; 41-44 = 2; ∞45 = 0)	
The probability that the audience will remember the speaker's 4-5 main points by this same time tomorrow	

- ✍ Note that the above only totals 90 points. The additional 10 points are reserved for the abstract.
- ✍ While all students in the course will evaluate the speaker, the grade is only based on the evaluation of the instructors
- ✍ Copies of the evaluation sheets will be available to students

How Real Scientists give talks

1) Real Scientists don't have to rehearse their talk. Spontaneity is more important than fitting into the allocated time slot. Imagine the air of excitement in the audience when a talk has reached the 15-minute mark without getting past the introduction. Real Scientists are not dissuaded from thorough exploration of their data and their implications, the antics of the moderator, the fidgeting of later speakers, and the stomach rumbles of the audience.

2) Real Scientists don't give introductions. If the audience knows about the field of research, it doesn't need any introduction. If it doesn't know the field, the speaker should not waste his or her time informing it.

3) Real Scientists keep the blackboard well-informed. Facing the screen or the board helps the speaker remember what he or she did. There is no need to raise one's voice or turn around-- the board is close and has no difficulty in hearing the speaker. Some Real Scientists prefer to talk to their manuscript. This is risky, because acute listeners in the front row might catch a few words.

4) Real Scientists don't label the axes of their slides. It is perfectly obvious what both axes mean. In any case, the description can be given verbally. Remember to use the terms "abscissa" and "mantissa" instead of "x-axis" and "y-axis".

5) Real Scientists don't label any lines on their slides. They put four or five curves onto one slide, and wave one hand vaguely at the screen while saying, 'This slide shows the effects of each of the treatments on a Type 3 test preparation'.

6) Real Scientists don't have to summarize their results. The cosmic significance of a 12.8% response was covered in the introduction. The time saved by not summarizing can be used more profitably in describing the precise composition of the buffers.

7) Real Scientists have at most 5 slides for a 15- minute talk. The audience has traveled all this way and deserves every opportunity to extensively study each of your slides, and appreciate the amount of work put into cramming all that data into just one slide.






8) Real Scientists have no slides at all, and draw everything freehand on the blackboard. This way, no reasonable person could expect them to label either axes or lines.

9) Real Scientists know that the audience recalls everything from last year's meeting. It's pointless to repeat slides or summaries already given 12 months ago. "You will immediately note how different this result is from the data I presented in Fig. 18 of last year's talk."

10) Real Scientists present all their data. To ensure that no one misses anything, they both point to and read off every line in every table in every slide. Merely to indicate the most important bits would be to insult the audience.

2. Before the seminar

† Familiarize yourself with the room

-  Familiarize yourself with the room, and the location and function of the light controls. That way you will not be fumbling with the controls during the seminar
-  Inspect the projector. Make sure that the remote control is functional and that you know how to operate it. Make sure there is a spare projector bulb nearby
-  If you will be using a projection unit, be thoroughly familiar with its operation well before your seminar
-  Make sure a pointer is available if you will need one
-  Whether a slide projector or projection unit is used, be completely set up and ready to go at least 5 minutes before the scheduled start of the seminar

‡ Review your slides

- ✎ None should be backwards, upside down, or out of place
- ✎ None should have bent edges or corners that jam the projector
- ✎ Number each slide in the correct order and orientation. This will prevent mistakes, and help recover the correct order should you drop the carousel or slides

3. Giving the seminar

‡ Start with a deep breath

‡ Have the beginning remarks well in hand

The beginning is the most difficult and critical part of the talk. Know how you are going to start and what you are going to say. *Begin by thanking your moderator* ("Thanks for the introduction") *and then address yourself to the audience* (e.g., "Thank you for this opportunity to speak to you," or "I'm really pleased at having been invited here.") This helps break the initial awkwardness, and helps establish rapport with the audience.

In addition, or as an alternative, tell a joke or amusing anecdote. However, *"people who are neither funny nor natural storytellers should steer clear of attempts at humor"* (Fryer, 1991). Anecdotes should make a point related to the subject. Avoid profane, foul, racist, and sexist comments at all times.

Instead of a joke, any small personal experience (such as why you chose the particular topic, or how what you are talking about relates to some personal experience) personalizes your seminar and helps establish rapport with the audience.

‡ Do not memorize the presentation

‡ Do not speak with your back to the audience

Establish eye contact, and avoid mannerisms that are distracting. Make sure that you speak loudly enough that all can hear you, even in the back of the room.

‡ Be true to yourself

Let your personality come through in the style of your talk. Don't try to mimic someone else's style of speaking and mannerism if these do not fit you.

‡ Be enthusiastic

If you do not act excited about your topic, neither will the audience. People want to be entertained as much as they want to be informed. Boring seminars are not enjoyed by anyone. However, do not take this to an extreme, and come across as being preachy.

‡ Have a beverage handy

When some speakers get nervous, they tend to speak too fast. Pausing for a drink of water is a way to regain composure and resume a more moderate pace.

‡ Attire

Though dressing down has become trendy during seminars, dressing down beyond a certain point conveys a certain lack of respect for an audience. Dress nicely but avoid extremes. A three-piece suit is one extreme, and shorts with a T-shirt is another extreme. Men should wear slacks and a polo or oxford shirt. Women should wear a blouse with slacks or skirt, or a dress. Ties are optional.

‡ Confidence

To get 1 hour of credit, you have invested considerable time to investigate your topic. You are the expert within the narrow topic area you have chosen. Therefore, do not be intimidated by the presence of individuals in the audience whom you might consider to be knowledgeable in the area you are speaking.

‡ Body language

Any mannerisms that distract listeners diminish the effectiveness of the presentation. Don't slouch, fidget, or act bored. Following are some of the most common distractions to avoid:

- ✎ The fencer: Duels with the pointer and forgets or refuses to put it down when not in use
- ✎ Darth Vader: Duels with the laser pointer and forgets or refuses to put it down when not in use
- ✎ The gazer: Constantly gazing at the ceiling or out the window as if were watching very intently
- ✎ The expiring professor: Leans heavily on the lectern, never moves, and appears as if each sentence may be the last
- ✎ The Pocknee pocket: Jingles and counts chalk or pocket contents every couple of minutes
- ✎ The expectant father: Paces back and forth, never looks at anyone, and orates to him/herself
- ✎ Bashful agronomist: Stands in one position with hands clasped in front, below the waist
- ✎ The pendulum: Shifts weight back and forth from one leg to the other
- ✎ The airplane: Places the pointer across the shoulders and drapes the arms over the pointer
- ✎ The Bert beat: Taps the pointer continuously on the floor

‡ Avoid excuses

Don't apologize for your speaking, visual aids, etc.

‡ Cartoons vs. diagrams

There is a growing tendency to refer to diagrams as “cartoons”. Note that these two terms are not interchangeable. Call a cartoon a cartoon, and a diagram a diagram:

‡ Ending the seminar

Ending can be as awkward as starting. Once the speaker has made it clear that the seminar is over, offer to entertain questions. Simply say something like, "Thank you for having come. At this time I will be glad to answer any questions that I can.". This lets the audience know that you have finished and that they can now ask questions.

‡ Questions

Make sure you understand the question. Repeat the question as a courtesy to those in the audience who were unable to hear the question. Remember: you should be the expert in the area. However, if asked a question to which you do not know the answer, simply say, "I really do not know". Never bluff your way through an answer. Honesty is always the best policy. If you are not sure if you have answered the question, feel free to ask, "Have I answered your question?"

Notes to the moderators:

After the speaker, the moderator is the next most important person in the room. It is the job of the moderator to introduce the speaker, ensure a smooth transition from the seminar to the question period, ensure the seminar ends on time, ensure the questions do not last forever, and solve any problems that may arise during the course of the seminar.

- † Get biographical information on the speaker before the seminar.
- † Do not take liberties with the speaker's name
- † The moderator should never give the title of the seminar, as this makes it awkward for the speaker. Speakers usually have a title slide as the first slide, and then they are forced to repeat their title after the moderator has just given it, or figure out what to do with the title slide in order to avoid repeating the title.
- † Have a question ready. Sometimes there is an awkward moment after the seminar. If the audience does not respond quickly, the moderator can smooth the transition from seminar to questions by asking the first question.
- † One of the most pervasive mistakes moderators make is to say at the end of a seminar, "Let's give our speaker a round of applause," or "a hand" or whatever the phrase may be. If you say, "Thank you for a great seminar," and start clapping, the audience will always join in. To specifically ask for applause can be offensive to some people. Remember that the audience will never let you clap alone. You have nothing to worry about if you start clapping after thanking the speaker.
- † Do not let questions go on forever. If the allotted time for questions is over and questions continue to be asked, by all means say, "That is all the time we have now for questions. However, I am sure that the speaker would be glad to answer additional questions individually after the seminar. Thank you for coming." {start clapping at this point}. Remember, during meetings, one of the moderator's most important functions is to ensure that the speakers remain on time.
- † Finally, remember the moderator must ensure that the seminar goes smoothly. Be prepared to help
 - ✎ Focus the projector
 - ✎ Ensure the appropriate lights are turned off/on
 - ✎ Any other contingencies that may arise

Posters

Posters have become an alternate method of presenting information that would otherwise be presented orally. Almost everything that applies to an oral presentation applies to a poster. A poster is not a substitute for a journal article-- simplicity, clarity, and attractiveness must prevail. The following information is abstracted from Anonymous, 1988, and from Simmonds and Reynolds, 1989:

† Posters must compete for attention with numerous other posters in the same room. In some meetings, the time allocated for a poster session is not enough for a person to leisurely visit all the posters in the room. Furthermore, friends and colleagues standing around are frequently more interesting to visit with than the poster itself. Unattractive or uninviting posters will not be visited.

† Posters should have the following sections:

- ✎ Title, authors, and addresses
- ✎ Introduction: Brief outline and justification for the research
- ✎ Materials and Methods: How the work was done
- ✎ Results and Discussion: An attempt to prove you achieved your goals
- ✎ Summary or Conclusions: The significance of your work
- ✎ References

† As with an oral seminar, first identify the points you want to stress, then make a small-scale sketch of the poster on a sheet of paper. Play with the sketch until you are satisfied. Then, make a mock lay-up [Hint: tape off an area the size of the poster on a blackboard or large table. Then draw on the board or lay labeled pieces of paper on the table. Move these around until you are satisfied with the results.

† While planning the poster, consider how people select the posters they choose to read. When people are scanning posters to find one worth their while, they first read the title, then the conclusions, then the introduction. Thus ensure your conclusion is excellent and interesting.

† Keep it simple. Concentrate on 2 or 3 main points. People have short attention spans in a poster room, and the fact they are standing on their feet shortens their attention span even further. Complicated posters can be overwhelming and uninviting.

† Use text sparingly, keeping it short and concise. Text alone is boring and unfriendly. Use charts, graphs, and diagrams, making key points in the legends. Outlines of important points can be more effective than text.

† Choose one background color and stick to it.

† All text must be legible from a minimum distance of 3 feet. Stick to a sans serif font (like this one), as it is easier to read in a poster situation. **Use bold type for headings.** Always have another person proof read the text.

† The font sizes below are the *minimum* sizes recommended. The following text is actually printed out in acceptable size, and you can use it as a reference to determine if your text is large enough:

Title [68 pt.]
Authors [34 pt. italic]
Addresses [25 pt italic]
Subheadings [bold 34 pt.]
Text [25 pt.]
References [20 pt.]

† Finally, remember posters must be transported! Keep individual sections small enough to fit in a briefcase (17 × 22 " or smaller) or under the airplane seat in front of you. If you are flying, never plan to carry your poster in your luggage.

Literature

- Anonymous. 1977. The art of not giving a paper. *HortSci.* 12:438. Abstracted from *Journal of Irreproducible Results* 23(1):9. 1977.
- Anonymous. 1988. Tips for excellent poster and oral presentations. American Society of Agronomy.
- Eastman Kodak Company. 1994. How to be a knockout with AV! KODAK Publication No. S-31. Eastman Kodak Company, Rochester, NY 14650
- Edelhart, M., and C. Ellison. 1989. Image Power. *PC Computing.* April:68-89.
- Fryer, B. 1991. Pointers for public speaking. *PC World* November:235-239.
- Heap, I.M. 1994. Eradication of noxious visual aids: Slides and overheads that work. *Weed Technology* 8:649-657.
- Kolowich, M. 1992. A bill of rights for presentation audiences is long overdue. *PC Computing.* April:70.
- Nelson, R. 1990. Graphics: the wretched excess. *Personal Computing.* February:49-50.
- Simmonds, D., and L. Reynolds. 1989. Computer presentation of data in science: a do-it-yourself guide, based on the Apple Macintosh, for authors and illustrators in the sciences. Kluwer Academic Publishers. Dordrecht and Boston. (Science Library: Q222.S55)

Additional reading:

- Bishop, A. 1984. Slides-- Planning and producing slide programs. Eastman Kodak Co., Rochester, NY.
- A Guide to Using Color with Selected Software Applications. Hewett Packard Company, Camas, WA. 1992. *This book is part of the collection found in the film recorder lab. Do not remove from that room.*
- Humes, J.C. and A. Paller. 1983. How to give the best presentations of your life. ISSCO Graphics Software Co., San Diego, CA.
- Meilach, D.Z. 1990. Dynamics of Presentation Graphics. 2nd Ed. Dow-Jones-Irwin. Homewood Hills, IL. (Science Library T 385 .M43 1990)

To help identify the proper way to target your seminar, fill out the following questionnaire before you proceed with preparations for your seminar:

- 1) What is the topic? What are the restrictions on the topic?
- 2) Why am I giving this seminar? (e.g., to get a grade; for a job interview, etc.)
 - a) What are the restrictions? (e.g., time, media used, etc.)
 - b) When must it be ready?
- 3) Who are the listeners going to be?
 - a) Their level of expertise is: high, medium, low, or mixed?
 - b) What is their attitude towards the subject? (e.g., confirmed believers, skeptics, hostile, etc.)
 - c) Their sense of humor is: high, low, unknown, mixed, nonexistent?
 - d) What is the reason or motivation why the audience wants to hear your message?
- 4) What general format type best suits your topic?
 - a) Outline
 - b) Circular
 - c) Tree
 - d) Other (Specify:)
- 5) What is (are) your intention(s) as you give this seminar?
 - a) Convince others of your knowledge and expertise
 - b) Convince the audience your view point is correct
 - c) Teach the audience something they did not know
 - d) Other (Specify:)
- 6) What approach should I be using?
 - a) Tone:
 - b) Point of view:
 - c) Scope:
- 7) What software will you use to generate slides, and what limitations does it have?