This booklet includes:

* Deadlines
* Conference Information
* Registration Information
* Guidelines for Computer Presentations
* Authors’ Guide for Preparing Conference Papers for Web and Print Distribution
* How to Give Better Technical Talks

Thank you for participating.

If you have any questions, please contact:

Meetings Department, ASABE
2950 Niles Road, St. Joseph, MI 49085-9659 USA
e-mail hq@asabe.org
phone 800-371-2723 or 269-429-0300, fax 269-429-3852.

DEADLINES
CONFERENCES: The conference proceedings chairperson will be contacting you with deadlines for submission of your prepared conference paper. You will need to follow this schedule so that your paper will be included in the book of proceedings for this conference and posted to the ASABE website in a timely manner.

ANNUAL MEETING: ASABE headquarters will be contacting you with deadlines for submission of your prepared meeting paper. You will need to follow this schedule so that your paper will be included in the CD Rom of the meeting and posted to the ASABE website in a timely manner.

CONFERENCE INFORMATION
Lecture presentations are the traditional, time-tested method of sharing information. The lecture presentation room is customarily in an auditorium configuration with the speaker in the front of the room. Available in each lecture room will be:

* screen
* microphone
* pointer
* lectern
* power point projector

Presentations are usually limited to 15 to 20 minutes and allow for minimal interaction with the audience.

CONFERENCE REGISTRATION
All lecture and poster presenters are eligible for the ASABE member registration fee and will be
required to register for the meeting to present their lectures and posters.

Guidelines for Computer Presentations

The purpose of these guidelines is to promote efficient set-up and use of computer projector presentations during technical sessions at the ASABE annual conference. Problems with compatibility, set-up and launch of presentations have caused delays in the technical sessions and frustrations for those presenting as well as the audience.

Moderators and presenters can help ensure that the presentations are ready and go smoothly during the session by following these guidelines. The moderators will have the primary responsibility for ensuring that the presentations are ready to go. ASABE will be providing the projectors, but most likely the laptops will need to be supplied by the moderator or individual speakers.

1. Moderators should contact presenters at least four weeks (or appropriate deadline – check with ASABE) in advance to determine if a presenter will require use of a computer projector.

2. Presenters should use presentation software that is standard, preferably MS Powerpoint. Use of common fonts (Geneva, Times, Helvetica, New York) will help avoid font compatibility problems. If MS Powerpoint is used, use the "Pack and Go" or "show" option.

3. A week before the conference, presenters should send an electronic version of their presentation to the moderator. The moderator will need to send a notice reminding presenters to do this. All presentation files must be loaded to a computer that can be readily connected to the computer projector prior to the start of the session.

4. Session moderators should coordinate among their own presenters to obtain a laptop and let the presenters know what mass storage devices will be available for the session. If no one in the session can bring a laptop for the presentations, the session will need to use other more traditional visual aids.

5. Moderators should give a brief review of the presentations to check for compatibility problems.

SPECIAL NOTE: Please contact your session moderator or ASABE headquarters if you have additional audio visual needs.

HOW TO GIVE BETTER TECHNICAL TALKS
prepared for presentation to the ASABE by Randall Reeder*, P.E

Communication is a window. Our engineering talents and achievements could be considered the "exquisite furniture" of our technical careers. We are judged or evaluated as engineers based on these engineering talents. Unfortunately, this "furniture" is in a room with no doors and only one window. Our colleagues, supervisors and subordinates cannot walk in and touch or smell our talents directly. Instead they must judge us by looking through our window of communication. Our engineering talents are revealed to others only through writing, speaking, or other forms of communication.
"Communication windows" which are smudged, dusty or fogged over, give others a distorted, unclear view of our engineering abilities.

About a thousand engineers are attending this international conference, at least partly, to get "refueled" and lubricated so they can drive on for another 6 to 12 months. I congratulate those of you here today who stopped long enough to also (ahem) . . . clean your windows. You (not I) will clean your windows of communication. I may provide the water, soap and a squeegee, but you will be doing most of the work.

ASABE Paper Presentations

The quality of oral paper presentations at ASABE meetings is important. Whether we like it or not, the audience judges us by how well we condense a year’s work into a 15-minute talk. And the judgment goes beyond the individual speaker.

If I were to give a poor speech, the audience might be thinking, "Not only is Reeder a poor engineer, but Ohio State University must be just a football factory. If all the ASABE talks are this bad, why did I waste my time and money coming to this meeting?"

So your professional reputation, your employer’s reputation, and even ASABE’s reputation are at stake as you approach the lectern.

Effective speaking requires . . .
Preparation,
Organization,
Interest,
Action, and
Visual impact.

Preparation

The three most important ingredients in any presentation are:

Preparation . . . Preparation . . . Preparation†

When you are prepared, your attitude improves, and your confidence grows. Preparation can compensate for lack of talent.

Know your goal. Even if you are simply "presenting information," your real goal is to have the audience understand ideas. You may not want any specific action or change in behavior. But you at least want the audience to understand your information and ideas in the way you intended them to be understood.

Spend at least 5 to 10 hours preparing your 15-minute talk. Preparation of good visuals will take even longer. (Other than preparing visual aids, most experienced speakers will not work that long on one speech; but be prepared to spend more if the quality of your talks starts to slip.)

Place slides in a carousel tray, with a blank slide at the beginning and the end, and practice so you know the sequence. Carry the slide tray with you to the meeting. Do not remove the slides. If flying,
do not pack the tray in checked baggage.

* Randall Reeder is an Extension Agricultural Engineer at the Ohio State University. He is a member of the National Speakers Association and Toastmasters International.

† Joel Weldon, speaking to Toastmasters International convention, August 1981.

Organization

Organize your oral presentation more like a front-page news story than a mystery novel. For a presentation longer than 5 minutes, consider the benefits of the "one-page executive summary" at the beginning.

If you have only 2 minutes to review a typical ten-page research paper, which sections do you read? If you're like I am, you would read the abstract, then conclusions, and look at the pictures. I do not start on page one and read for two minutes, and neither do you.

An oral presentation should provide the same quick overview for the audience.

Repetition

Repeat main ideas. Repeat main ideas. Repeat . . . Readers can turn back a few pages to double check a key paragraph. Listeners cannot. If you emphasize 3 or 4 key points, you won't have time to cover all 10 or 20 less important points.

Is this a problem?

The audience will remember only 3 or 4 of the ideas presented anyway, so it's better if you select those for the listener. (If the audience must have the other information, provide a written supplement.)

The success of a technical presentation is not determined by how much information is presented. Rather, what counts is how much essential information is understood and retained by the audience.

Who gets tired? In any speech either the speaker or the audience gets tired. If the audience has to work hard to understand what the speaker is trying to accomplish, they will rebel! The harder you work at preparing and presenting your talk, the easier it is on the audience. And, they will like you better.

Audience Analysis

Here, the audience may be 10 to 200 engineers in a technical session. But there are many "audiences".

* Often the audience will be one person.
* Six managers or the board of directors.
* Five people who work under your direct supervision.
* Thirty members of a local civic club.
* The audience may be 50,000 viewers of a local television news program waiting for your explanation of how your company allowed a hundred gallons of a toxic chemical to spill into the river.
Each audience requires somewhat different preparation.

Don’t expect to satisfy every person in an audience of 10 or more. If someone is obviously bored or not paying attention, don’t knock yourself out trying to win him or her over. You can easily use 80% of your energy trying futilely to communicate with 5% of the audience. Concentrate on key listeners.

The message is #1. In a technical presentation to a technical audience, written or oral, the content is critical. Speaking skills are still important but cannot rank above #2 (or perhaps #1A).

Your audience must understand your words, or you can’t expect them to understand the message. Ask yourself these four questions about the words you use:

Are you being specific?
Are you saying what you mean to say?
Are you saying all you mean to say?
Will the audience understand your words?‡


People who attend technical seminars or single presentations tend to have a specific purpose, a sharp focus, and for the most part are demanding and serious. They value their time. If they feel their time is being wasted, they will certainly let you know.§

In dealing with technical material, a speaker should take the audience from where they are to where you want them to be.| |

What Is a Good Speech?
* It renders a service.
* It gives valuable and important information the audience probably wouldn’t have otherwise.
* It ought to be in a form they can put into immediate use.
* It ought to motivate and inspire them to want to put it into immediate use.#

Enthusiasm and Persuasion

A new book by world-renowned speech expert, Bert Decker**, points out a common problem for most engineering speakers. Decker says we each have two brains: the "first brain" is emotional, non-rational; and the "new brain", which is the seat of conscious thought, memory, language, creativity, and decision-making. When most people, especially engineers, speak they aim their message at the new brain and overlook the first brain. The key: to reach the new brain (rational) our message must first pass through the first brain (emotional). Otherwise the message will be diminished, distorted and may not get through at all.

How does Decker suggest we reach the first brain? By being warm, genuine, less inhibited, and by speaking with energy, enthusiasm, and expression.

One survey disclosed that four out of 10 top executives said they have fallen asleep during office
presentations? (The survey did not tell what percent of the presenters were engineers.)

Another revealed that 44 percent of 200 vice presidents responding said that most business presentations were "boring" or "unbearable".

Here are some things to do to keep dozing to a minimum during your presentations:††

* Concentrate on the first 15 to 30 seconds of a presentation because they are critical. Establish eye contact and rapport before you turn out the lights for a slide talk.
* Master your subject and be enthusiastic about it. You need to believe in what you’re saying.
* Never read or memorize your presentation. Reading reduces eye contact, and memorization makes your talk appear canned. Strive to be as spontaneous as you would in everyday conversation.
* Learn how to use your voice with high and low and loud and soft tones.
* Use "periodic power pauses." Refrain from talking. This allows you to think and your audience to digest what you’ve said. Pauses add a dramatic punch.
* Be natural with your non-verbal actions. Smile, frown or look surprised when the occasion calls for it.

Visual Aids

Good visuals can make a good technical presentation better, yet an excellent speech can be destroyed by poor visuals. Even a few bad slides in an otherwise good set can ruin a good speech.

# Dr. Kenneth McFarland, speaking to Toastmasters International convention, August 1980.
** You’ve Got to Be Believed to Be Heard, reviewed by Communication Briefings, April 1992.
+++ Roger Flax, Communication Briefings, December 1989.

Why Use Visual Aids?‡‡

* Retention increases from 14% to 38% when listeners see as well as hear.
* Time required to present a concept can be reduced up to 40%.
* Group consensus occurs 21% more often when visuals are used.

Use more visual aids than you usually do when presenting to an audience whose native language is not English. Also, if your native language is not the same as members of the audience, use more visuals. Seeing key words, photos and illustrations will greatly improve listener’s understanding.

Since 1970, I have discussed slide quality with hundreds of engineers. I have learned much and have passed on suggestions for improvement to others. Many have told me they wished someone had provided these tips before they made so many mistakes. Well, somebody did, as you will note in the following quote:

* A slide should present one and only one central idea.
* A slide should be as brief as possible.

It is better to make two slides, each of which will convey its message forcibly and clearly, than to make a single crowded slide that may confuse the audience.

* A slide should not be entirely complete and self-explanatory, because it is supplemented by the speaker’s explanation of the point it is intended to illustrate.

* Only the specific items to be mentioned in the presentation should be included. All nonessential captions, figures, equations, and the like should be omitted; otherwise, audience attention may wander to unimportant details.

These basic rules weren’t etched in stone, but you won’t find any better "commandments" for producing good slides.

The most common problem is putting too much information on one slide. A related problem is using too few slides.

Some people say too many slides is a problem. But the only real difficulty is talking too long about each slide. Eighty slides is not necessarily too many for a 15-minute talk.

You can describe a new combine design much quicker with 20 slides than with one. As you consciously plan to use more slides, you will naturally reduce the need for too much information on any one of them.

Tables and figures directly from a research paper are never suitable. They are cluttered with too much detail and cannot be read beyond the third row without binoculars.

Do not show complicated formulas or long equations unless absolutely critical.

If you are planning to convert slides to color prints for a poster display (such as for an ASABE One-on-One session), change the format to take advantage of the opportunities not available on a screen.

Do not expect a single "all-purpose" visual to be ideal in a paper, slide set, poster display, videotape or other media.

The Pointer Principle

Do you want a method to help you eliminate the cluttered slides? Try the "Pointer Principle":

A good slide will naturally cause the viewer to focus on the desired area. (Sometimes an oral instruction as "The red line shows. . .")

‡‡ You’ve Got to Be Believed to Be Heard, Bert Decker; quoted in Communication Briefings, July 1992.
Here is a simple example of the Pointer Principle: Using one slide (a side view of a tractor), the speaker discusses the radiator, fuel injector, differential lock, pto shaft, and air cleaner. During the 10-minute lecture he uses the pointer to identify each item. When he gets to the air cleaner he announces brightly, "It's on the other side of the tractor," as he glances at the back of the screen.

Unfortunately for the audience, a speaker often uses a pointer as a cane, twirling baton, and screen beater. If the speaker is several feet from the screen, he may substitute a "flashlight" pointer; in that case he simultaneously does his imitation of Don Knotts in the "Shakiest Gun in the West". It's hard to concentrate on the speaker's message with a light bouncing around the front of the room.

How could the tractor presentation be improved? Include at least one close-up view of each tractor part discussed. Additional views may help, such as photos of a dirty air filter element being removed and a new one installed. A cutaway drawing of the air cleaner, in color, showing the air flow path would help. By showing extra slides of each part the speaker intended to "point" out, the presentation becomes clearer and probably shorter. And the pointer is not needed.

Does the Pointer Principle work with tables? Of course.

Begin with a slide with 5 rows, 6 columns. That is 30 characters, the maximum allowed for a reasonably good slide. Suppose you want to discuss this slide for 2 minutes, emphasizing (pointing out) 5 of the numbers.

Before proceeding consider this: If you are discussing only 5 numbers, why show the others at all, and would that data be clearer in different form (charts or graphs)? If you still insist the table is needed, with all 30 numbers, use 5 slides with the emphasized number circled or highlighted in each one. Why not use just one slide with the 5 numbers circled? While you are discussing the first one, the audience will be wondering what is going to be said about the other four. You should keep the attention riveted where you want it. And you can do it without a pointer.

More Slide Tips

* Vertical slides are a no-no in technical presentations. If you never take a vertical slide, you will not be tempted to use them. If you do take a vertical photo (often preferred in print), be sure you take an equal quality horizontal slide.
* Never use 8-1/2" x 11" typed copy as an original. Typed copy should never be more than 4 inches wide.
* Use color. A figure in a paper is black on white. Five curves on a graph may be identified by symbols such as - - - - - - - and o-o-o-o-. For a slide, use color to distinguish each curve, with the identification written clearly, in the same color, near or on each curve. To help color blind listeners (10% of all
males), orally identify or locate colors.

* Simplify figures and tables for slides. All writing should be horizontal or close to it. Show only the essential information for the point you are making. Eliminate clutter and details.

* Round off numbers. Calculations or conversions from English to metric units sometimes result in unjustified precision. Do not say "40.47 hectares" if what you mean is "about 100 acres." Use precise numbers if needed in your written communication, but simplify them for your speech.

* The availability of computer graphics for top quality slides has eliminated most excuses for poor quality visuals. Engineers who tend to force too much data on boring slides should find a good "slide service" and allow the graphic artist to determine how information is to be shown.

Overhead Projector Tips

Most of the tips on slides apply as well to overhead transparencies.

However, a list of ten items on a transparency can be revealed one at a time, replacing ten slides.

You can discuss five numbers on a table, marking each with a special pen as you speak, replacing five slides.

Room lights can stay on and bright.

You can easily add, take out and rearrange transparencies.

You can maintain eye contact, always facing the audience.

Unfortunately, the ease of use and the flexibility sometime result in poor, sloppy presentations. You must discipline yourself as a speaker to prepare good quality, colorful, legible transparencies to get the full benefit from the overhead projector.

Although most overhead transparencies are "vertical", I suggest using the same horizontal format as a slide. Therefore, since a typical overhead projector is about 9 inches wide, use only 6 inches vertically on any transparency.

Microphone Tips

* Practice with the microphone before the session begins.

* Watch how the presider and other speakers use the mike, and learn from their experience.

* Do not shove the mike aside. If it’s there and other speakers used it, you probably need it too.

* Adjust the microphone position once, then it’s "hands off".

* Keep the mike below chin level so everyone has an unobstructed view of your face.

* With a stationary microphone, imagine there is a string connecting your nose to the mike. As you move, or turn to look at the screen, always keep facing toward the mike.
* With a hand-held mike, find the best position for it and try to keep it there. Gesture with the other hand.
* Ahead of time, ask someone in the back row to signal you if your volume needs adjusting.
* Continue to use the microphone during questions and answers. Repeat the question before answering.

CONCLUSIONS

As you consider these points about preparation, organization, and visual aids, the road to better speaking may appear to be an uphill climb. But it isn’t.

As you prepare your talk for the next ASABE meeting, think of all the things going for you:
* The written paper, available to everyone, has the details, so you can concentrate on the most important points (and sell the audience on reading the paper).
* The audience is provided for you. You do not have to round ‘em up. And unless you are positively awful (or last on the program), they won’t walk away because they have come to hear the other speakers too.
* Good audiovisual equipment is supplied for you, usually in a suitable room.

With all those advantages, a little extra effort can go a long way toward building your reputation as a better speaker, a better engineer, and a better ASABE member.

Don’t forget to clean your windows.

Written by:

Randall Reeder
4779 Baldwin Rd.
Amlin, OH 43002

home 614-876-6942
work 614-292-6648
FAX 614-292-9448