

How to Give an Academic Talk, v3.1



Paul N. Edwards
School of Information
University of Michigan

www.si.umich.edu/~pne/

*You may redistribute this document freely, for any purpose except private profit,
so long as nothing is added or removed, and so long as this copyright notice remains attached.*

Quasi-permanent URL: pne.people.si.umich.edu/PDF/howtotalk.pdf

COPYRIGHT 1998-2009 PAUL N. EDWARDS. ALL RIGHTS RESERVED.

NB: I wrote this essay on behalf of bored audiences everywhere. It is widely circulated on the Internet. As a result, I receive large volumes of email requesting help with presentations. Unfortunately, my students here at the University of Michigan are about all I can handle, so please seek personal assistance elsewhere.

The Awful Academic Talk

You've seen it a hundred times.

The speaker approaches the head of the room and sits down at the table. (*You can't see him/her through the heads in front of you.*) S/he begins to read from a paper, speaking in a soft monotone. (*You can hardly hear. Soon you're nodding off.*) Sentences are long, complex, and filled with jargon. The speaker emphasizes complicated details. (*You rapidly lose the thread of the talk.*) With five minutes left in the session, the speaker suddenly looks at his/her watch. S/he announces — in apparent surprise — that s/he'll have to omit the most important points because time is running out. S/he shuffles papers, becoming flustered and confused. (*So do you, if you're still awake.*) S/he drones on. Fifteen minutes after the scheduled end of the talk, the host reminds the speaker to finish for the third time. The speaker trails off inconclusively and asks for questions. (*Thin, polite applause finally rouses you from dreamland.*)

Why do otherwise brilliant people give such soporific talks?

For one thing, they're scared. The pattern is an understandable, if dysfunctional, reaction to stage fright. It's easier to hide behind the armor of a written paper, which you've had plenty of time to work through, than simply to talk.

But second, and much more important, it's part of academic culture — especially in the humanities. It's embedded in our language: we say we're going to "give a paper." As a euphemism for a talk, that's an oxymoron. *Presentations are not journal articles.* They're a completely different medium of communication, and they require a different set of skills. Professors often fail to recognize this. Even more often, they fail to teach it to their graduate students.

Everybody has to confront stage fright in his or her own way. But academic culture is something we can deliberately change. This pamphlet attempts to jump-start that process with some pointers for effective public speaking.

Principles of Effective Talks

Listening is hard work. Especially at conferences, where audiences listen to many talks over many hours, *people need the speaker's help* to maintain their focus. Therefore, any effective talk must do three things:

- (1) Communicate your arguments and evidence,**
- (2) Persuade your audience that they are true, and**
- (3) Be interesting and entertaining.**

In our obsession with persuasive arguments and evidence, academics sometimes forget about the third item on this list. Sometimes we think it follows automatically from the first two. (It doesn't.) Sometimes we even scoff at the goal itself. Perversely, some of us seem to believe that if a talk is entertaining or easy to follow, it's probably not very deep.

These attitudes are seriously mistaken. *It is impossible to communicate and persuade effectively without entertaining as well.* Keeping people interested and involved — entertaining them — matters because in order to communicate your work and its value, you need their full attention. This is the true meaning and significance of “entertainment.” In an academic talk, entertainment isn't about making your audience laugh or distracting them from their troubles, but simply about keeping them focused on and interested in what you have to say.

Some Rules of Thumb

No rule applies always and everywhere. But the following principles work almost all the time.

<i>USUALLY BETTER</i>	<i>USUALLY WORSE</i>
Talk	Read
Stand	Sit
Move	Stand still
Vary the pitch of your voice	Speak in a monotone
Speak loudly, facing the audience	Mumble, facing downward
Make eye contact	Stare at your laptop
Focus on main points	Get lost in details
Use outlines, images, and charts	Have no visual aids
Finish within your time limit	Run overtime
Rehearse	Don't practice because you're too busy working on the slides
Summarize your main points at the beginning and end	Start without an overview; trail off without a conclusion
Notice your audience and respond to its needs	Ignore audience behavior
Emulate excellent speakers	Emulate your advisor, even if s/he gives lousy talks

This list really says it all, but here's a little discussion about why these principles are so important.

Talk, rather than read. Written academic language is usually quite complex — far more complex than ordinary speech. So while good academic style can make beautiful *reading*, that doesn't translate into beautiful *speaking*. Sentences tend to be long, with many clauses and arcane vocabulary that become impossible to follow when read aloud.

Don't read. Just talk — you'll be easier to understand, and you'll make genuine contact with your audience. Furthermore, ultimately you'll think more clearly. If you can't communicate your points by talking (without reading), how well do you really know what you want to say?

One thing many novice presenters forget is that listening to someone read bullet points off a slide can be even more stupefying than listening to them read a paper. Your audience will usually read the entire slide in the first 30 seconds it's on the screen, far faster than you can read it aloud. Don't insult their intelligence by reciting it to them. Instead, use the bullet points mainly as memory jogs; speak about them and from them, rather than reading aloud. If you absolutely must read from a text — and as a beginner you may feel you have no other choice — keep your text separate from your slides.

Stand up. If people are sitting in rows, stand up, even if there are only a few. This lets people in the back rows see your face and hear you better. (**Rule of thumb:** if you can't see their faces, they can't see yours.) Standing also puts you in a dominant position. This sounds politically incorrect, but it's not. Remember, you're the focus. The audience *wants* you to be in charge, so go ahead and take the top-dog position, physically above their heads.

Exception: seminar-style presentations around a table with only a few people (fewer than eight or ten). In this situation, everyone can see you and standing up usually seems too formal.

Move around. It's easier to keep focused on someone who's moving than on a motionless talking head. Hand gestures are good, too. Don't hesitate to show your enthusiasm for your topic; it's infectious.

It's possible to overdo this one, though. If you leap around like a rock star or stab the air with rap hands, you'll distract people from the content of the talk. Simply walking back and forth from one side of the room to the other every 3-4 minutes is usually enough.

Vary the pitch of your voice. Monotones are sleep-inducing. Many people don't realize they do this. Get a trusted friend or colleague to listen to your delivery and give you honest feedback. (This is an important principle in itself!) Even better, tape or videotape yourself and check out how you sound.

Speak loudly and clearly, facing the audience. Be careful, especially when using visual aids, that you continue to face the audience when you speak. Turning around to look at your own slides can lead you to speak to the screen. This mutes your voice and breaks your contact with the audience. Instead, train yourself to look at slides on your laptop screen (and be sure it is in front of you, not off to one side or behind you.) If you absolutely must look at the main screen, train yourself to glance at it briefly and then turn back to the audience.

This is one reason why simple, uncluttered slides with *minimal text* are crucial. If you have too much text, you'll have trouble keeping track of where you are in the talk.

About Vocal Technique

Public speaking is much like singing. It takes a lot of air. You're going for volume, range, and effect. You want to fill the whole room with your voice; people in the back rows must be able to hear you clearly. Make a recording of yourself speaking in a large room. Do you talk in a monotone? Do you mumble? Do you speak too fast? Do you project confidence and authority, or does every statement come out sounding like a question?

Speak from the gut, not the throat. Learn about, and practice, diaphragmatic breathing (breathing from the belly, rather than the chest). Nervousness tends to make breathing shallow and rapid, but what you need is exactly the opposite. Breathe deeply — it's necessary to generate volume, and will also help you keep your mind clear. If you don't, you can actually pass out from lack of oxygen. Really.

Use the bottom of your vocal range, its deepest pitch. This is also your loudest and most commanding tone, and it helps establish your legitimacy and authority. (This can be especially important for women.)

Most people don't realize how quietly they speak. When you hit an adequate volume, you may feel like you're shouting. It's better to be a bit too loud than too quiet. Aim your voice at the people in the last row, not those in the front. This takes considerable practice, especially to maintain a sufficient volume throughout a talk. If sound reinforcement (a microphone) is available, it usually makes sense to use it.

Silence is a crucial element of speech. A continuous flow of speech soon becomes soporific. Stop the flow of sound frequently by pausing briefly at the ends of sentences, or between slides. Sometimes people drone on because they fear being interrupted. Remember: you're in control during a talk, so you don't have to accept interruptions if they do happen.

Tip: use vocal "special effects." For example: (1) Echo key phrases. When you hit a phrase you want people to remember, "echo" it: repeat it, once, then move on. (2) Pause for a few seconds — that's longer than you may realize — at several points in your talk. This gives you a chance to sip some water, which will lubricate your throat. These long pauses will re-awaken anyone who's tuned out.

Make eye contact with your audience. If this is anxiety-inducing for you, at least *pretend* to make eye contact by casting your gaze toward the back and sides of the room. People will think you are looking at someone, even if you only look at the wall just above their heads. Another technique is to locate a few friendly individuals, at different places in the room, and speak directly to them, switching frequently from one to another.

Avoid "siding." Be careful not to ignore one side of the audience. Many speakers "side" unconsciously, looking always to the left or to the right half, or only to the front or the back, of the room. Because it forces you to stand far to one side or the other, using a projector

tends to amplify this effect. Moving back and forth periodically, from one side of the screen to the other, can minimize this effect.

Speakers also tend to concentrate on those who seem to be responding well (nodding, smiling, etc.). *This can be a trap.* In professional situations, it's often the people who are frowning, falling asleep, or seeming bored whom you most need to draw in. If looking at them directly makes you uneasy — and it *can* be extremely flustering — use the technique of casting your gaze just above their heads toward the back of the room.

Focus on main points. Especially in a conference situation, where talks are short and yours is just one of many, your audience is not going to remember details. In such a situation, less is more. Give them short, striking “punch lines” that they'll remember. They can always read your written work later, but if you don't get them interested and show them why it's important, they won't learn enough to *want* to read it.

Use visual aids. Among the most important principles of all. At a minimum, have an outline of your talk. Some speakers seem to think they're giving everything away by showing people what they're going to say before they've said it. Instead, the effect of a good talk outline, well presented, is exactly the opposite: it makes your audience curious to hear the details. At the same time, it helps them follow the structure of your thinking.

Slides should be extremely concise and visually uncluttered. Slides are maps, not territories; they are tracking devices that let both you and your audience follow the flow of the talk. Therefore, they must not be overfilled. 6 lines of text per slide is good; 9 lines is a lot; 12 lines is pretty much unreadable. Bullet points should be no more than a few words — NOT complete sentences.

If you need more space, use more slides. One of the beauties of PowerPoint is that you can have as many slides as you want. I've seen extremely effective presentations with only one word on most slides, only one image on many others.

Always choose white or light-colored slide backgrounds. Why? To see light text on dark slides, you'll have to turn down the lights, or even turn them off. This makes it hard to see your notes, the podium, etc. Worse, it will tend to put your audience to sleep. Really. Dark text on light-colored slides can usually be read with lights on and shades open. Don't let your host, or anyone else, manage the lighting for you — tell them you prefer to leave the lights on. If you can see it, your audience can probably see it too. If in doubt, walk to the back of the room and check.

People are visual creatures, and the old adage that a picture is worth a thousand words is especially apropos here. Pictures, graphs, charts, cartoons, and other images can be extremely helpful. As with text, keep them simple and uncluttered. Also, avoid dark images that won't show up well on a screen.

Avoid the pitfalls of video. In the context of a 45-minute talk, even one 3-minute video clip can seem interminable. More than one can make people want to scream. They also break the flow, and eat up time better saved for your presentation. If you really need video for your topic, edit clips to an absolute minimum length. 30-40 seconds is a good goal.

About Powerpoint

Powerpoint, Keynote, and other presentation software — standard issue in many settings — can be a great tool, not least because its default formats encourage brevity.

But **beware**: PowerPoint's fades, transitions, backgrounds, sound effects, and so on can be a real pitfall. Glitzing up your presentations can turn into a serious time sink, detracting from the far more important time you spend on content. Also, they can give your audience the impression that you care more about surface than substance. Finally, they can cause breakdowns during the presentation if they don't work as you expect them to. Which is often. And nothing irritates an audience more than watching somebody fiddle frantically with a computer in the middle of a talk.

So — keep everything basic, at least until you've completely mastered the software..

Talk to the audience, not the screen. One of the worst presenter mistakes is to face the screen while talking. If you do this, the audience will be looking at your back, and they won't be able to hear you. Instead, have your laptop, or a paper version of your notes, in front of you. Speak from that, rather than from the slides on the screen. **This takes practice, practice, and more practice.** Everyone else is staring at the screen, so you may find yourself drawn to stare at it too.

Plan for Disaster: Computers and Murphy's Law

Computers introduce many possible points of failure into presentations, so Murphy's Law — "whatever can go wrong, will go wrong" — applies in spades. Something can, and usually does, go wrong with the computer, the projector, the software, the connector cables, your thumb drive, or your presentation itself. Never assume that what works on a PC will work on a Mac, or vice versa. You also can't assume your host will have the same version of PowerPoint that you do. Inquire in advance.

Bring backup. Even if you bring your own computer, badness can happen. My hard disk drive once crashed — permanently — on slide number 3 of a one-hour talk. This kind of thing not only *can* happen to you, it *will* happen to you. The question isn't whether, but when. So: if you use a computer, **always bring backup.** That's **backup, backup, backup.** Begin making backups several days before the talk. Use a USB thumb drive, a CD-ROM, or some other common medium; network backup isn't reliable, since you can't be sure you'll have a connection. You can keep thumb drives in a pocket or hang them around your neck. That way, even if somebody steals your bag or your laptop, you've still got the backup.

Plan for disaster. Bring printed notes or outlines. If the computer or the projector commits suicide in the middle of your talk, you'll have no time at all to fix it. None. So: always be prepared to deliver your talk without the slides, as a last resort. This is where you will really be glad you brought printed notes. Speaking without slides is one thing, but speaking without ANY notes is a skill only the greatest presenters ever master.

Summarize your talk at the beginning and again at the end. “Tell ‘em what you’re gonna tell ‘em; tell ‘em; and tell ‘em what you told ‘em”: this ancient principle still holds. Following this rule helps your audience get your main points. Even more important, it helps them *remember* what you said. Which is, after all, why you’re there. You can be creative about how you give such an outline; a few phrases can do the whole job, posing a puzzle or a problem you’re about to solve and showing the way to the solution.

Notice your audience and respond to needs. If people seem to be falling asleep, or getting restless or distracted, the problem may not be you or your talk. Is the room too hot or too cold? Is it too dark, or too noisy? Can people see you? Is the microphone on? Is something outside the room distracting people? Don’t hesitate to stop talking in order to solve these problems.

Alternatively, you may have gone on too long, or you may need to speak louder. Whatever the case, notice what’s happening and use it as feedback. If you can’t figure out why your audience is responding poorly, ask somebody later and fix the problem next time.

If you’re not sure whether people can see or hear, *ask* someone in the back row directly. (This is also a good technique for setting up initial communication with your audience. It makes listeners feel included, and puts you in touch with them as human beings.)

Tip: Taking charge of the talk environment is part of your job as a speaker. Never let others control room conditions. Many "helpful" audience members react to the use of a projector by jumping up to turn off lights and close window shades. Unless this is truly necessary, avoid it at all costs, *especially* at conferences, which often take place in exceedingly dim hotel meeting rooms.

Finish within your time limit. Don't diss your audience by running overtime. *Never* go longer than 45 minutes — most people’s maximum attention span. If you exceed this limit, you’ll lose them at the crucial point, namely your conclusion. Whatever the time limit, respect it.

In conference settings, exceeding your time limit is also incredibly rude, since it cuts into other speakers’ allotted time and/or the discussion period. If an ineffective panel chair fails to restrain a speaker who runs over, wait a couple of minutes, then interrupt (politely) and say something like "I'm sorry, but I'd like to be sure we have enough time for my talk as well." No one will hold that against you.

If you do run short on time, try to avoid saying anything about it. Talking about your own timing wastes words and draws unwanted attention to your apparent lack of preparation. Just pause, make some adjustments so you can finish on time: skip slides, say less about each one, jump to the conclusion.

About timing

Timing a talk well is among the most crucial of presentation skills. Nothing's more embarrassing than getting only halfway through your talk before hitting the time limit.

Practice, practice, practice. The only way to be sure you time things right is to rehearse your talk: every word of it, exactly as you plan to deliver it. Timing is a complicated, learned skill that requires a lot of practice — so practice where it's easy and comfortable, i.e. at home, or with other students.

Have a timing device. You are (or you're becoming) a professional presenter. So invest in a watch especially for this purpose. Some digital watches have countdown timers, better than ordinary watches because you don't have to perform mental math to know how much time remains. But these only work if (a) you remember to use the timer, (b) the numbers are large enough to read easily while you're talking, and (c) you're paying attention, so you can turn off the timer before it begins to beep. An analog watch with large, easy-to-read hands can be better, but still requires mental math.

PowerPoint's "Presenter Tools" has a stopwatch. This is a great way to keep close track of your time. The problem, once again, is remembering to start the stopwatch at the beginning of your talk. Personally, I find it easiest to use an analog watch.

You can develop your sense of timing by always using the same slide format. After you've given a few talks with the same format, a little quick math will tell you how many minutes it usually takes you to talk through one slide. From there, you can estimate the length of a new talk from the number of slides.

Decide in advance what you can skip. Make a small mark on dispensable slides, if you need to. If you do run short on time, ALWAYS skip slides in the middle and jump to the conclusion so you can spend enough time on that. NEVER just plow ahead, talking faster and faster and trying to cram it all in. You'll only succeed in irritating your audience and forcing your host to cut you short; this can only end badly.

Tip: Say you have 20 minutes to talk. When you're rehearsing, mark your notes or slides when you hit the 5, 10, and 15 minute points, maybe also the 18-minute point. That way you won't be caught by surprise if you start to run overtime.

Another tip: until you've really mastered presenting, *never, ever* try to improvise during a talk. This doesn't mean you can't interrupt yourself to tell a joke or a story, or digress a bit from the main thread — those can be important techniques for entertaining your audience, keeping their attention, and showing your human side. What it does mean is that *you must rehearse those things as well, because they take time*. If you haven't practiced them, you won't have any idea how long they take (usually a lot longer than you think). Like a professional comedian or actor, you need to practice *everything* you plan to do — including things you want your audience to think you're improvising.

Keep control of the talk situation. Sometimes people will interrupt you during your talk. If it's just a clarifying question and it's short, fine — answer it and move on. But much more time-consuming and flustering situations can occur. I'm talking about the awkward situation in which somebody bursts out with long, loud comments or arguments in the middle of your talk. This can be extremely disturbing, especially for grad students at the bottom of the professional hierarchy.

Anticipate this and have a strategy for maintaining control. Unlike soccer games, talk periods don't get extended to make up for time-outs caused by the audience. You can't afford to spend five or ten minutes on a digression in the middle of your presentation, because you won't get that time back.

The best techniques I've found are the following. First, you can cast a glance at whomever is chairing the conference session, or your sponsor at a job talk. If you're lucky, that person will intervene on your behalf. Second, you can wait politely until the outburst stops, then say as calmly as possible something like: "Thank you for your comment. I'd like to respond, but if you don't mind I'll hold that for the question period."

Your last alternative takes steel nerves, but sometimes there's no other choice. For example, your tormentor seems determined to drone on for ten minutes and nobody seems willing to stop him/her. This is when you need to say loudly but firmly, as authoritatively as you can: "Sir (or madam), please allow me to finish my talk." Then simply proceed and ignore further interruptions from that person. Remember, everyone in the audience is probably feeling your pain and looking for a way out of the situation. If you can muster the courage to shut the heckler down, others will pile on, and you'll be saved.

Emulate excellent speakers. The very best way to become an excellent speaker yourself is to watch really good, experienced speakers and model your talks on theirs. I'm sure your advisor is a great thinker or scientist, but this does not necessarily translate automatically into great public speaking. Academia is full of lousy speakers, so you may have to look hard to find a truly great role model.

When you do find role models, notice not just what they say, but what they do: how they move, how they use their voices, how they look at the audience, how they handle timing and questions. (**Caution:** it's important to find someone in your field to emulate. Great political speaking styles, television-personality styles, etc. don't usually work well in academic settings. Respect the speaking conventions of your own social world.)

If you find an excellent model and work hard to emulate that person, you can't go wrong. Your own style will come in time.

Last words:

Practice everything. Test everything. Plan for disaster. Show up at the talk site at least 15 minutes early — 30 minutes if possible — to check equipment, mount and test your slides, scope out the room, and get comfortable in the setting.