

Technical Training as a Performing Art

BY DR. RICHARD ROSE

It takes more than just

technical knowledge to capture

the attention and interest of

your student audience. Read

on for ways to improve your

teaching performance.

Many training organizations confuse public speaking with teaching. I found this out some months ago when I spent a few hours with a senior executive of a major corporation's technical education department. He wanted me to write a course to prepare new trainers to teach networking. The executive had a vision of a short, quick-hitting presentation on public speaking ("platform skills"). He believed that technical knowledge plus platform skills assured adequate teaching. I pointed out that a more important equation is a little longer:

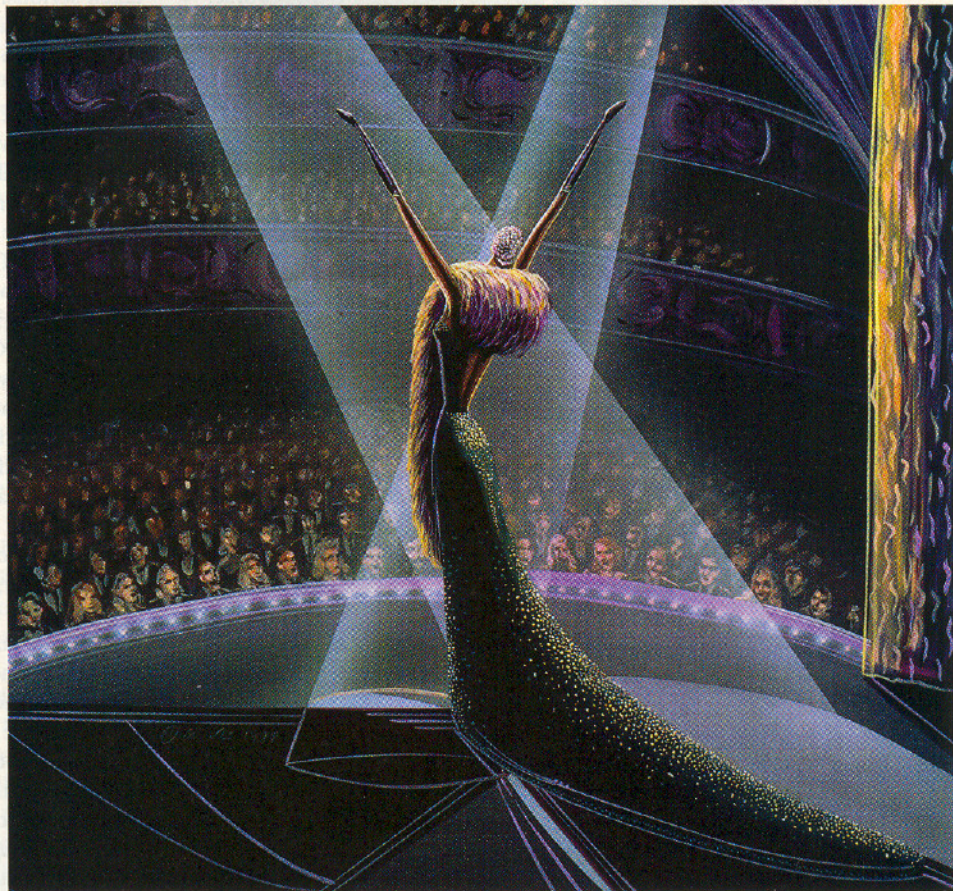
Technical knowledge + a passionate interest in the subject + trust-building skills + understanding the needs of adult students in general + understanding the particular needs of your specific audience + flexibility + a variety of teaching styles + the ability to find or create supplementary materials + lab facilitation skills + individual coaching skills + evaluation and remediation skills + traditional platform skills = great teaching.

I offered to construct a five-day train-the-trainer experience touching on all of these, to be followed by a six-month struc-

tured internship during which the teacher-in-training would work under the guidance of an experienced master teacher. The executive declined this approach as unnecessarily cumbersome and expensive. It is hardly surprising that this organization's percentage share of the training dollars spent on preparing students seeking network certification has shown significant erosion.

PERFORMING WITH PASSION AND COMPASSION

Although there is more to great teaching than public speaking skills, your platform skills are critically important to your



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success with technical students. Platform ability (or the lack of it) is often the first thing that your students will notice about you, and you don't get a second chance to make a first impression.

This aspect of teaching is like an artistic performance. When a trainer is in "performance mode," he is on stage as much as an actor in a play or a singer in a band. Like all performers, the trainer needs to hold the audience's attention and convey a message. An actor conveys meaning. A singer conveys emotion. A really skillful technical teacher conveys both meaning and emotion. The emotional content of the teacher's message is a passionate interest in the subject being taught.

Developing top-notch platform skills is a real act of compassion toward your students. They may not be in your class by choice. Their bosses may have required their attendance. Even if they did make a personal decision to attend, they are very much your prisoners for the duration of the course. They paid for it, they are committed to it, and they really

can't just get up and leave. Anyone who has ever been in a room with a poor presenter for a two-, three-, or five-day class knows how painful the experience can be. If you agree that part of what you want to do on this planet is to take your best shot at not adding to the total amount of human suffering around you, then developing your platform skills to the highest possible level becomes nothing less than a moral obligation to those who must sit still while you speak.

WHAT MAKES A GREAT PLATFORM PERFORMER?

Having watched many public speakers who were initially awkward blossom into confident competence, I know that great platform performers are made rather than born—but made of what? The only power you have when you speak to adults is the power they give you. What causes adult students to grant a speaker the power to enter their minds and be taken seriously?

The first teacher known to have asked these questions was (yikes!) Aristotle, and no one else's answers have ever proven to be more useful than his. In preparing this article, I reviewed 16 college textbooks on public speaking and compared them with my own experience. With very minor variations, they all agree with each other and with what I have seen in 20 years of presenting to audiences of 10 to 500 listeners. These books all draw so directly on our long-dead friend that, if he were alive and kicking, he could sue for intellectual theft. So hang on to your shorts while I offer a three-paragraph summary of what he said back at the Academy in 335 B.C. We will then spend the remainder of this article seeing how Aristotle's ideas translate into practical strategies for the modern technical trainer.

Aristotle claimed that speakers were listened to and believed if they had a thing he called *ethos*. It is easiest to consider *ethos* by example. Larry King of CNN and Chris Berman of ESPN have it for many of us. Paul Harvey has it for others. These communicators would have a good chance of selling us a subscription, a lounge chair, or a new idea. We take what they say seriously because they are the ones who are saying it. Most people would find many of today's political figures at least a quart low in the *ethos* department. *Ethos* is not something you flat-out have or lack, like red hair or a lovely speaking voice. It is a special type of positive light in which a particular speaker is held (or not held) by a particular group of listeners.

There are three components to *ethos* and you need all three to make it happen. Here they are, with the question that defines each of them in the minds of your listeners:

1. Knowledge. (Does this person know what he is talking about?)
2. Integrity. (Can this person be trusted?)
3. Caring. (Is this person speaking with intention of furthering my interests, or just his own?)

If you appear to lack knowledge, you will be considered too incompetent to take seriously. If you appear to lack integrity, you will be considered too dangerous to take seriously. If you appear to lack caring, you will be considered too distant or too irrelevant to take seriously. But if you are perceived as having plenty of all three components, your audience will accept you as a teacher and carefully consider everything you have to say. (Some authors have added a fourth element to

BEAT THE BUTTERFLIES

A good warmup routine can help you reduce your pre-performance jitters. Here are the three elements of my own pre-class warmup:

1. In the few minutes before I am about to enter the classroom, I use measured breathing. When I am nervous, my breathing becomes shallow and irregular. By consciously deepening and smoothing out my breathing, I can smooth out my jumpy emotions (and my jumpy stomach) as well. Find a breathing pattern that works for you. Mine is "In, 2,3,4, Hold, 2,3,4, Out, 2,3,4,5,6,7,8." I actually say this in my mind as I breathe the slow 16-count pattern.

Don't be discouraged from trying this because it seems weird or New Age-y. It works! The next time you are in a major convention, notice those blue-suited speakers from IBM as they sit waiting for their turn to dazzle their audiences with their high-powered, enormously expensive multimedia presentations. I bet they'll be doing their measured breathing!

2. I let two thoughts roll around in my mind. First, nobody expects me to be perfect. It would scare them if I were. They prefer me to be human. Second, the overwhelming majority of the audience is in my corner. Their lives will be more pleasant for the duration of the talk if I succeed in entertaining and informing them. So I start out with some good will to work with. Have I included a small joke or pleasantry in the first minute of remarks? I imagine what the laugh I expect will sound like. I know I'll probably get it.

3. Whenever possible, I engage the audience before I begin my formal presentation. I circulate and work the crowd. This way, I learn a little bit about them, make a few friends, and, above all, get my mouth moving. When the formal presentation begins, it seems almost like a natural extension of the conversations I have already initiated.

ethos, which they call "likeability." This isn't a particularly useful focal point, since knowledgeable, caring people with integrity can't help but be liked, except by mean-spirited people who are jealous of them!)

At first, consciously polishing one's ethos might seem highly manipulative. It almost sounds like you are trying to be your own spin doctor. But there is nothing dishonorable about improving your ethos because the only way to consistently appear knowledgeable, honest, and caring is to be knowledgeable, honest, and caring. If a trainer is an under-prepared, disinterested slime-ball, slick "tricks and tips" cannot fool his audience into thinking otherwise. (No amount of cologne can take the place of bathing!) Still, even if you possess all three ethos components, it is possible to be granted less ethos than you really deserve by your audience if your platform skills are working against you.

For a more complete discussion of ways to expand your ethos, one book leads the pack: *I Can See You Naked: A Fearless Guide To Making Great Presentations* by Ron Hoff, ISBN 0-8362-7946-8. If you care enough about your platform skills to have read this far, you will want this very entertaining book.

Now that we have seen what makes a listener admire and accept a speaker, let's look at some practical things we can do to increase our knowledge, integrity, and caring scores in the eyes of our students.

HIGHLIGHT YOUR KNOWLEDGE

Overprepare to create options. If you accept that the best way to appear knowledgeable is to be knowledgeable, then the value of adequate preparation is obvious. Overpreparing is learning more than you need to know to just get by. Be prepared to speak in greater depth about your subject than you expect to, and always have some additional information on related topics ready in case your audience shows particular interest in something you have discussed. For example, if your text requires you to say something about ATM, you would do well to compare and contrast it with Frame Relay. If you are teaching Novell 4.x NDS, you should have some familiarity with Banyan VINES as well. Try to anticipate some of the questions your audience may ask.

Overpreparation is automatic for great performers. Follow the example of the great actor, Hal Holbrook. Some years ago, he played Broadway and toured with a fabulously successful one-man show called "Mark Twain Tonight." Hal's show consisted of three hours of stories told in the person of Mark Twain. He prepared for the show by working up eight hours of stories, and he never knew which three hours he would actually use on stage. His overpreparation let him make moment-to-moment decisions about what to do next, based on how his audience was responding to what he had already done.

Warm up to beat the butterflies. You won't appear knowledgeable if you look nervous. While you may never totally eliminate pre-performance jitters, you can certainly get them under control. A great tool to achieve this is to use a reliable warmup routine. Every singer, actor, and athlete has one. You should, too. (See sidebar, "Beat the Butterflies," for my own pre-class warmup.)

Communicate confidence non-verbally. An orchestra conductor's performance does not begin with the first note.

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It begins at the moment he walks from the wings of the stage to the podium, smiles at the concertmaster, and raises his baton. His pleasant manner and easy, relaxed gait send a message to the audience (and the orchestra) that he has studied the score thoroughly and is confident that he is ready to perform it. He has taken time to deal with details, like making sure his tailcoat is nicely brushed.

Public speakers must also pay attention to this type of detail. Neat dress and an erect posture create an aura of confidence and knowledge around a speaker. Avoid looking like you just dropped off a moving van and don't know what town you are in (even when it's true!). Be particularly careful to avoid nervous gestures, such as playing with a T-connector, while you are talking.

Perfect your first five minutes. Hoff defines a presentation as a commitment by the presenter to help the audience do something—and a constant simultaneous evaluation of the worth of that commitment by the audience. Never will your audience be as eager to judge whether you are knowledgeable enough to keep that commitment as in the first few minutes of your speech. Consider this as you apportion your preparation time. I never memorize a whole speech word-for-word, but I will always have my first few paragraphs down pat and prepare them with the greatest care.

Use well-organized crib cards. Index cards are better than loose sheets of paper that can flap noticeably if you get nervous. Your cards should outline the major points you wish to make. You won't want to read from them, but they will be a great comfort in your palm. Divide each card with a line down the middle. On the left, put your "Main Track" of points that you must discuss. On the right, put the "Scenic Route" of points you can add to enrich your talk if the audience is particularly enthusiastic about a topic. This is part of preparing yourself in advance with a comfortable set of options.

Frame at every level. You will know exactly where you are taking your speech and where you currently are during its course, but your audience will not. To stay with the program, they will need you to frame your information with signposts. Signposts are like those maps they spread around Disney World that inform you that "You Are Here."

Most speakers do gross signposting by framing their entire talk as a whole with two signposts. They tell their audiences what they will be talking about at the beginning of a speech and remind them of what they did talk about at the end. More complete signposting can be done before and after sections at every level of the speaker's outline. Statements like the following are always welcome: "This completes our discussion of Ethernet within our larger topic of the OSI physical layer. After I take whatever questions you may still have on Ethernet, we will complete our look at the OSI physical

layer with a discussion of Arcnet and Token Ring. We can then address the data link and network layers of the OSI model before lunch. If we complete all seven layers of the OSI model today, we can begin with the next major section, network troubleshooting, in the morning."

HIGHLIGHT YOUR INTEGRITY

Be yourself. Personalities are like physical bodies. You pretty much get issued one at or near birth for this ride. You can keep it healthy, trim it down a bit, or beef it up a little. That's about all you can do with it. If your genes say you are Woody Allen, no sane amount of effort is going to make you into Arnold Schwarzenegger. Similarly, you can extend your range of comfortable platform behaviors a bit and learn to compensate for elements in your personality that may not be working for you in a speaking setting, like shyness. You can't acquire the Ideal Speaker's Personality through any force of will, which is fortunate, because there isn't one anyway. Some great speakers of the past have been loud and boisterous and

some have been mellow and composed, but all have been authentically whoever they happened to be.

Practice saying "I don't know." Staying current in the computer networking trade is an endless struggle. This is particularly true if you are locked into a schedule that has you teaching almost every day of the month. You can sacrifice your evenings and weekends to keeping up with the field for only so long before you become seriously out of balance. This

means that you will often be in the position of having to tell your students that you just don't know something. Learn to do this easily and without hesitation or reluctance. Our field is so broad and the amount of information so overwhelming that even the world's greatest expert on one specialty probably has to call someone else in for guidance on many others. If you must walk directly off a plane and into a lab with a brand of computer that you have never seen before, you may literally need to fumble around to find the on/off switch.

Be up front about your limitations and immediate handicaps. If you have an extensive resumé of hands-on professional experience, there is no need to recite it. It is far more effective to just refer to what you learned in the field (and where) as it comes up naturally in the course of the discussion. But if you are a "paper" instructor with very limited hands-on experience, it might be wise to share your background with the class early on. You may lose a student or two when you do so, but most of your class will simply adjust their expectations to what you are really capable of offering them. Nothing is as tiring or as unlikely to succeed as pretending to have more real-world experience with the course material than you actually do.

It is also often a good idea to share any immediate temporary handicaps that you may be facing. Without playing for

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sympathy, it is best that your students know if this is your first day back from a bout with the flu. Trust them to understand. You certainly don't want them to interpret your apparent lack of energy as the absence of concern for them or lack of interest in the subject matter.

Use war stories and professional self-revelation as a chance to share who you really are. Invite your students to do the same, when appropriate. Adult audiences love to hear real personal experiences that their instructors have had in the field when working with the technologies explained in the course materials. They like it even better when the end comes with an amusing punch line and the joke is on the instructor himself. I often make the point that you need to check your installation work as you go along by referring to the time I set thirty Arcnet dipswitch address blocks backwards in a school computer lab and had to reopen thirty cases with eight screws each to fix them.

I once observed an experienced technician who was making his maiden voyage as the instructor of a hardware troubleshooting class in a networking certification program. His instructional skills were limited and he was very close to reading directly from the book. Within an hour, over a third of the students were playing solitaire in Windows. He droned on about cable installation—something about so many meters from the something to the something. All of a sudden, inspiration struck. He walked out from behind the desk and sat on top of it. Then he said, "Let me tell you what we ran into when we tried to install this miserable 10Base5 junk at the insurance company..." Every head went up. Our instructor spent a good portion of the rest of the class drawing on his considerable experience for war stories about his work in the real world. I'm not sure the textbook ever got covered, but the students learned a lot and were actively engaged for the rest of the course.

HIGHLIGHT YOUR CARING

Practice one-pointed attention. In any performing art, the ability to concentrate completely on the one thing you are doing is of paramount importance. Consider the pianist who is playing an hour-long composition from memory. What chance would he have of getting through it if his mind were wandering to what he planned to do after the concert? One-pointed attention is far from typical in our scattered American lifestyle. This is particularly true in the computer culture, where the ability to do personal multitasking is considered a major virtue. We are used to doing five things at once, and, sometimes, none of them well. Concentrating on a single thing is a learned skill. You get better at it with practice.

Related to the need for one-pointed attention is the ironic fact that the most important prerequisite for showing your students that you care about them is to care about yourself—

specifically, your own body. If you are exhausted, sleep-deprived, terribly out of shape, or emotionally under the weather, it will be all the more difficult to give one-pointed attention to your performance. The key fact is that you teach with your body. It is your body that stands in front of the classroom and must move around the lab. Take care of it.

Make sure the physical environment is ready and comfortable. I cannot overemphasize the importance of planning for a comfortable physical environment. Many a potentially great speaker has shot himself in the foot by not making concrete arrangements with the janitor to get the classroom door unlocked on time and the heat turned on (or off). Real pros keep a personal pre-flight preparation checklist with items like "Locate spare overhead projector bulb."

Anticipating the simple needs of your audience is a great way to show that you care. Suppose that in the course of a five-day class, you will be giving out the addresses and phone numbers of several vendors where your students can get demo diskettes. Type them all out and have copies available on a

table in the back of the room (or pass the list out as a hand-out). Don't make them scribble them all down on the fly.

Size your presentation to the current speaking situation. Your platform style should reflect the reality around you at the moment that you speak. This will include the nature of the speaking occasion, the size of the audience, the composition of your audience, the size of the hall, the hour of the day, and the season of the year.

Imagine that you are giving an update presentation to a class of experienced networking technicians about a recently improved router. They all have installed earlier revisions of this router in the past. You have one day to convey the new information about the new features. You expected a group of 20, but only six showed up. The designated start time is 8:00 a.m. It is mid-winter. The room is a cold, cavernous lecture hall in an old campus building. Under these circumstances, you would do well to ask your audience to come to the front (or get another room), do what you can about the heat, use a conversational colleague-to-colleague tone, and get right into the technical information that might interest them with a minimum of preliminaries. You would be perceived as very uncaring or, at best, seriously out of touch if you spoke in the large, warm, animated style you might use if you were teaching Elements of Data Communications to a full hall of college freshmen on a warm spring afternoon.

It is especially important to find out about and pay attention to the nature of your audience: their number, background, nationalities, ages, and genders. The thought that "SNA or NFS doesn't change depending on the gender of the audience you are discussing it with" may be politically correct, but it won't help you on Game Day. For example, only the most inexperienced of platform performers would claim

Real pros keep a preparation checklist with items like "Locate spare overhead projector bulb."

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that the techniques used by a man addressing a group of thirty men in their twenties should be identical to those used by the same man addressing thirty middle-aged women. The two situations are not the same, and the wise speaker is sensitive to the different psychological dynamics of each.

Be easy on the ears and eyes. A little variety is always preferable to monotony. Vary your pitch, volume, speed, and gestures to match the variations in your material. Be particularly careful to avoid repeating the same sentence structure or speaking cadence that can irritate like a dripping faucet after a few hours. For example, some speakers always pause just before the last few words of every sentence. ("Today, we are going to discuss a great new technology—ATM. It competes with another popular technology—Frame Relay. It is organized around a special type of informational unit—the cell.")

Cultivate a warm, pleasant speaking voice to fit most occasions. Use intelligible diction and speak at a reasonable pace. Avoid excessive jewelry or sloppy dress that distracts and detracts from your message. It is awfully hard to take a speaker seriously if his bottom shirt button is open and the audience is wondering if any lint is going to drop out of his navel. Dress professionally, but comfortably. If an overly tight shirt collar makes you look or sound uncomfortable, your audience will be uncomfortable watching you as well.

Use a mirror, tape recorder, or video camera to get a sense of what you look like and sound like to your audience. The common reaction to hearing or watching oneself speak for the first time is an intense desire to call Dr. Kevorkian or, at least, change careers. Don't despair. Remember that a grating voice and an awkward platform presence are not permanent handicaps. These are just bad habits that can be unlearned.

Use full-room eye contact. Most speakers understand the importance of maintaining eye contact with the audience, but many apply the idea badly. One common mistake, encouraged by some misguided texts for freshman speech classes, is to pick a point on the back wall (like the fire extinguisher) and focus on that as you speak. While the understandable intention of this gimmick is to get the speaker's head up even when he is too terrified to look at anything with a pulse, the speaker who does this consistently develops an "automatic pilot" look often associated with ingesting illegal substances.

A second common blunder is to talk only to the first row. Don't be the parson preaching to the choir. The people who are more detached from you and your subject are those sitting in the far corners of the back rows. That's why they sit there to begin with. Do everything you can to non-verbally invite them to participate actively with the course, including making frequent eye contact. When you come back from every break, ask yourself "Who didn't I make contact with much in the last hour?" and resolve to do better in the next hour.

Use time with compassion. Show respect for your class and your subject matter by starting on time and ending on time. This will give your audience a comforting sense that the class is under control. Of course, you can negotiate an extra half-hour if your class wants to explore an optional enrichment topic, but this should be a conscious decision on the part of the group.

A typical adult can normally give a speaker his complete attention for about forty minutes. A full hour is pushing it. Anything beyond that will leave a good part of your audience listening to nothing but the unmet needs of their bladders.

While frequent breaks are clearly a matter of survival for a speaker, you can waste a great deal of time if you allow breaks to drag on. To avoid varying interpretations of what "fifteen minutes" means, get one of those cheap see-through pocket watches available at Radio Shack. After you negotiate a time to be back from a break, project the "official time" through your watch on your overhead projector.

It is awfully hard to take a speaker seriously if his bottom shirt button is open.

GROWING AS A PLATFORM ARTIST

This collection of suggestions is only a starting place for improving your ability as a platform speaker. Practice is, of course, the critical component of growth, but it must be a special type of practice. Some speakers are awful for 20 years running. You probably

had a professor or two like this in college. They get constant practice in speaking to audiences, but they never improve. We can call them "terminal beginners." That is because they are not paying attention to audience reaction, considering what it is trying to tell them, or making adjustments to their style in light of what they have learned.

Great speakers, like any other performing artists, constantly place themselves in the role of students of their art. They take every opportunity to hear other speakers with good reputations and swipe the best stuff that they hear. After each performance, they reflect on what worked, what didn't, and how they could do better in the future. They invite trusted colleagues to sit in on their performances and help them gain insight on how they can improve. It is this reflective practice that assures constant growth.

As a networking professional, you already know that your ability to continue to be technically credible depends on your consistent effort at broadening your range of technical competence and sharpening your skills. That's why you read *Stacks*. If you apply the same energy to sharpening your platform skills, you will move rapidly from being a technician who does some teaching to becoming a technical platform artist.

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