

Tips for Technical Trainers

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Introduction

The tips that follow will help you get the best learning out of the whatever time you have with participants in a technical training session. It will also help you have a successful experience as an instructor and maximize your own learning from this experience.

Things to know before your Session:

Tip 1: Adults Learn best from Hands-On Experience In adult learning principles, "knowledge", or knowing about something, is only the first step. To say you have learned something you have to be able to actually apply that skill or knowledge. Making the classroom experience as close to real-life as you can manage will help your learners transfer that learning better back to their desks.

Just to underline the importance of this first tip, note that a study conducted by IBM found the following results:

Table 1: Learning through Experience

	Told	Told & Shown	Told, Shown and Experi- enced
Recall after	70%	72%	85%
3 weeks			
Recall after	10%	32%	65%
3 months			

Source: Whitmore, John <u>Coaching for Performance</u>, Pfeiffer & Company, 1994.

As Table 1 shows, people who have learned experientially will have significantly greater recall of the learning over time. Especially striking is the difference between recall after 3 months using the lecture method - 10% - and the experiential method at 65%.

Whenever possible, build exercises into your plan that let people try the skill out for themselves. Allow enough time for people to work through the exercises at different speeds. For the best way to know how to plan this, see Tip 2.

Tip 2: Test out your Learning Design before going Live

Planning and conducting training is usually done by people who are very good at the skill they are trying to teach. Without realizing it, you may be assuming your learners know more than they actually do. In order to understand how well this will get across to learners, field test your plan on people who are representative of your learning group. Encourage them to ask questions and give you feedback. Keep track of how much time activities take, whether they are too easy or too difficult, and whether your instructions are clear. Also check in advance to be sure you have planned enough, but not too much, for each session. The more typical error is to plan too much in each session, leaving learners scrambling when they get back to their desks.

Decide in advance what your learning objectives are for each session, and ask your test group if they felt those objectives were accomplished. Here are some examples of learning objectives:





"Participants can get access to the new system on their own."

"Participants can find and use the help system."

"Participants are introduced to the process of building a requisition and know where to get help to build one in their home environment."

Your test group can tell you if they feel they actually learned these things or not and you can modify your design accordingly. If they feel they did not learn what you set out to teach, try adding another chance to practice, or try cutting back on the learning objectives, giving people more time to really learn the things they need to use back on the job. As a general rule, adults are more interested in what it is that they need to use in their jobs right away, and less interested in the finer points and nice-to-haves that experts in the system might be interested in. Again you can get feedback from your test group or individuals.

An additional benefit to testing out your design is that it will help you feel prepared and confident.

Tip 3: Don't let Logistics get you Down

Ensure that you have the right room booked, extra handouts, equipment in working order, overheads prepared and system working. It sounds basic, but these are the things that can make a total failure out of a workshop or course.

Ensure also that the learners know where they are supposed to be.

A quick pre-course checklist can save the day (especially if you check it the day before.)

Speaking of logistics, when arranging them, considering offering coffee, juice, snacks and potentially lunch. The offer of food tends to boost attendance and keep participants around longer.

Things to Know During the Session

Tip 4: A Good Beginning goes a long way!

Use the first five minutes of your course to establish a good tone for learning. This will help everyone relax and get into a learning frame of mind. It will also begin to build rapport with you as an instructor, and sustain you later if anything goes wrong in your course.

To set a good tone:

- Welcome everyone to the workshop. An enthusiastic, warm or engaging manner helps learners buy in.
- 2. Introduce yourself and briefly explain your credentials as an instructor. You may have a lot of experience as an instructor or none look to where your credibility comes from. In many cases technical training is done by internal experts. Their credibility comes from knowing the organization, the people and the new system. You might say something like: "I'm Joe, and you know me as the person who answers questions about invoices. Today I'm going to walk you through the automated invoice process and hope that what I've learned about it will be helpful to you."
- 3. Review the agenda and learning objectives with participants.
- 4. After reviewing the agenda, ask people what their expectations are for the session. Will their





needs be met if the agenda is covered? Or were they expecting something that they don't see on the agenda? If people do ask for some things you haven't planned for, you can either clarify that you won't be covering those things, or make a plan to get to those things at some point during the session. If there are things you won't be covering, make a note of them. You might like to plan another session, or get back to the individuals in question on a one-on-one basis.

Once you have set a good tone for learning, you and your participants will have a much easier time.

Tip 5: Adult Learners want to be Treated Respectfully

Adult learners may or may not be enjoying the learning experience you are providing. Typically, you will have three types of participants: prisoners, who are coming because they have to, vacationers, who figure this is better than time spent at work, and keeners, who are interested and want to learn. All three types of learners will react negatively if they feel you are putting them in the old teacher-student, top down relationship.

One way to show respect in the classroom setting is to make it easy to ask questions. Tell everyone that at the beginning that they should feel free to ask questions. As an instructor, this is your in-class feedback and way of knowing if you are explaining things well for this particular group of learners. Another important point about making questions easy to ask: Take the onus on yourself as the instructor. Instead of "Is that clear to everyone?" (makes it hard to say "no.") ask "Could I explain that more clearly?" or "Would you like me to run through that again?" In this way people can ask the instructor to

respond rather than having to stick their hands up in front of their colleagues and admit that they did not understand something

Tip 6: Understand different Learning and Thinking styles

Some learners learn best when they can think things through sequentially, that is, step by step in the right order. This represents a "sequential" learning style. They are most interested in how to do something practical. Other learners need to understand the context and the big picture – the "why" – before they can concentrate on learning a task. This is the more "abstract" style of learning.

To be prepared for both types of learners, ensure you can explain at the beginning of a task why it needs to be done (preferably in real life, not just in the classroom setting) how this task fits into the sequence of other tasks learned, and then demonstrate how to do the task step by step. Allow learners at least one and possibly more opportunities to practice the task. While they are doing it, be available to answer questions.

Other influences on learning styles include pace and timing. You may think you can go through something fairly quickly, but your learners may be at a whole different point of understanding. They may need you to go back over things you think you have covered. In addition, your own learning style may influence whether you explain things in a fairly abstract way or a sequential way.

The best ways to mitigate for these factors are to pre-test your design before the session and during the session, keep checking in with the learners to see if they are understanding you.





Tip 7: Ensure you can be clearly heard

Sounds simple, but it's true. If you speak too quietly or too quickly, it will take a lot of energy for people to hear you. They may ask you to speak up once or twice, but if you forget and go back to "default" eventually they will give up and do the best they can through trial and error.

Get some feedback on your vocal intonation, clarity and vocal variety from your test group. Ask during the session if people at the back can hear you. Watch people's body language. (If they are leaning forward, cupping their hands to their ears and saying "eh?" that would be evidence that you should speak up.)

Tip 8: Use appropriate Humour

Let's face it: technical training, even if you desperately need it to do your job, can be very dry. A little well-placed humour can lighten things up. If humour is not a knack you have, look for some cartoons or overheads that are relevant to the training at hand and use them when you think you need to jazz things up a bit. Too much humour or inappropriate humour can cause problems though. Let your test group be your best guide.

Tip 9: Ensure you build in breaks

An old adult education saying is "The brain can only absorb what the bum can endure." Plan breaks at least every two hours and start back promptly after breaks. It can be suicidal to go much past lunch hour...the maximum advisable is 12:10. Learning drops off rapidly when learners are hungry, tired and distracted. Never go later than the agreed-upon time for the session unless you have discussed this and the learners have agreed to stay later.

Tip 10: As soon as you have the feeling something's not going well, identify and address the problem

Even in a well-planned session, things can go wrong. If you have built good rapport with your participants, they will work with you to sort things out, depending on the problem. Try to spot the problem before the learners do.

The first step is to identify what you think is not going well. Is it that people have finished the task and are now just chatting? Is it that loud arguments are breaking out? Is it that the task is so complicated that individuals are still sorting out the instructions 30 minutes into a 40-minute activity? Once you have identified what you think is not working, you have some options:

- Clarifying instructions can help. For some learners repeating the learning objective and instructions for an activity helps them get re-focused.
- Modifying the time allowed for each segment can tighten up activities where time is being wasted. It is a little harder if the activity requires more time than you have allocated. In this case, you have to assess whether the learning from the activity will still result if the activity is truncated. Alternatively, if you allow more time for it, you need to judge if other learning objectives in a session will be compromised.
- The case of a total breakdown of an activity, for example, an exercise that causes an angry reaction on the part of most of the group – perhaps they disagree with how something will be done within a new system – can provide a rich opportunity for learning. In this case the facilitator may able to debrief the activity with questions like "What suggestions do you have for how





this can be improved?" and "What can we learn NOT to do from this activity?" and "Can you say more about your concerns?" Make notes of the issues and tell them what you will do or to whom you will take the concerns. Note that this is a lot easier to write about than to actually do in the moment! Avoid arguing with participants – note down concerns and move on, promising to get back to people later. This will help you get through the session. You can deal with more complex issues when you are not under time pressure and public scrutiny.

Tip 11: Ask for Feedback and Receive it Gracefully

Have a prepared sheet ready to get some written feedback from participants. Make it short and easy to answer, and let it be optional whether they put their name on it. If they have a concern that they want followed up on, ask them to include their names. The written feedback is valuable to help you tweak the timing, content, and delivery for the next set of learners and instructors. It also should have some place on it for feedback on what went well during the session.

Leave 5-10 minutes at the end of the session to fill out the form. If you let the forms go out of the room you will at best see 2% of them returned to you.

A word to the wise: try not to dwell on the feedback if you are tired or discouraged at the end of the session. Even if 8 out of 10 learners were satisfied, a tired instructor will focus on the two that were not happy. Take a break and return to the feedback later.

If you run out of time for written feedback and have to ask for a quick summary verbally, practice saying "Thanks for the feedback." Never argue about feedback with participants, even if you know the feedback is unfair or untrue. Just note it down on the flipchart for later reflection.

Things to Know after the Session:

Tip 12: The Reflective Instructor Continually Improves

Because today's technical training sessions are interactive and dynamic, there are any number of ways sessions can turn out. Take some time at the end of a training session or program to reflect with colleagues on the things that you have learned by instructing the sessions. The skills learned through planning and instructing sessions are transferable to meetings, presentations and other situations, and will enhance your own ability to learn quickly and effectively.

Selected References

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Tip Summary

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