Instructors Guidelines for Subject Matter Experts

You're an expert! Now someone has recognized that and given you a chance to share some of your knowledge and skills. But you've never done training, so you're not sure how to make it happen.

This is a step-by-step guide to preparing a training session of 1-2 hours in length. Good luck to you.

1. Consider & decide what information to include

Trainers generally offer three categories of information: Facts, Procedures & Concepts. The last is used more in "education" than training. You'll probably want to focus on facts & procedures, but if some of the concepts will help the learners to better understand facts & procedures, by all means include them.

Choose things that have a sufficient depth to them that you can speak about them for at least five minutes each. For example, an accountant might list: "Understand the various parts of a balance sheet."

List up to ten things which small contracting companies need to know in your area of expertise.

Now go back rank them 1-10 according to importance.

Choose the most important 5 or 6 points from your list of 10. It will be hard to cover more in 2 hours.

2. Specify what trainees need to know about these points

For each one of these, complete the following sentence: "After my 2 hour presentation, the people who attended will be able to …." Your next word should be "explain," "list," "describe," "demonstrate," "use," "calculate," "analyze," "solve," "arrange," "create," or a similar active verb. The rest of the sentence is up to you.

3. Develop "Validation Questions"

Training serves no purpose unless is gets applied by the learners. Possible ways of doing that include having them actually demonstrate it in class before they leave, taking a very short oral or written quiz of some kind, accurately describing in their own words to you (or a classmate) how they will accomplish the task, or any other technique that you believe will work.

For each of the 5 or 6 sentences from the previous section, ***write a new sentence which tells how you will at the end of the training session confirm what the trainees have learned***.

4. Plan the overall presentation

Adults learn best by doing. A standard adult “learning styles” model divides people into visual learners, kinesthetic (activity based) learners or auditory learners. Over 90% of people fall into the first two categories. What that means to you is that you need to structure your training in a way that allows your trainees to physically do things and see things, not just hear them. (One of the bestselling books on training is titled “Telling Ain’t Training.”)

Physical involvement may be created by doing an exercise, trying an experiment, accurately completing a form, discussing their experience with the topic with a classmate, solving a puzzle or problem, and so on. Simply having the trainees write notes is also an effective form of kinesthetic (active physical) involvement, so leave some space in your handouts (or give them blank sheets of paper) to encourage that.

For each of the 5 or 6 points, list what you can do to involve the students in the lesson kinesthetically.

Next, for each of the 5-6 points, how could you make the training visual? Could you demonstrate something, bring along samples, do a show-and-tell, present a short video, guide students through the process, or (at a minimum) write the key points on a flip chart or use a Power Point presentation.

List visual options for each point.

5. Develop the lesson plan

You need to create an outline of the material that will be covered. You should not try to write out a script; doing so tempts you to read it or memorize it, both bad ideas. First decide in what order you will present the 5-6 points. Sometimes this will be obvious based on the material, but not always. Your options include starting with: (a) the most interesting material to hook them in; (b) the simplest material, then the more complex; (c) the first step in a process or the most basic principle; (d) the big picture, then the parts; (e) whatever is likely to be most familiar to the trainees, and ending with the least familiar; (f) one source of information (such as a safety manual), then another source (installation manual, perhaps, etc.); (g) “how to” then “why” then “exceptions;” and many other possibilities.

Re-order the 5-6 points into the sequence that makes the most sense for your presentation.

6. Work out the presentation details

For each point you'll be covering, add notes about the process by which you intend to present the information, any references you are using (articles, names, page numbers, etc.). When you get to actually writing out your final lesson plan, it may be useful to work in two columns, the left being what you'll cover, and the right being how you'll cover it.

Write out one or two ideas for each of the points on how you will present it during training.

7. Prepare handout materials

Decide what materials you will provide in written form for people to take back to the job. Handouts serve two basic purposes: (1) To provide detailed information which might be hard to write down during the training, and (2) To help guide people along as you go. Your handouts should start with an agenda or list of the points you will be covering. Information which is complex or things which need to be performed in a specific way due to regulations or safety should be spelled out in detail. A short list of references may be a good idea: Include your contact information (if you're willing to offer it), any web sites which offer technical information to support your presentation, any professional associations you've referenced, definitions of key words that might be new to the trainees, and so on.

Besides providing specific information, handouts should be also used to allow the participants to follow along more easily and to take notes on what they consider important. If you're using PowerPoint, one of the options can be to make handouts printed directly from your .ppt or .pptx files. The "3-to-a-page" choice in the software prints note taking lines beside each slide and gives people an exact copy of what you presented. If you do this, be sure to exclude any slides with copyrighted material from the handout and any that are superfluous for other reasons. When you distribute these, be sure to encourage people to add their own notes to the pages, and not to rely on only your presentation points. If you're not using PowerPoint, include spaces after each key idea for people to write their own notes.

Make a list of any handouts you will use in this training session.

8. Prepare supporting visuals

Don't just think "PowerPoint"® when we speak of visuals. While that can be a good technique, it is often overdone or badly done. The phrases "death by PowerPoint" and "Power pointless" have been coined by dazed trainees who have lost the will to participate. The greatest sins of PowerPoint use include: (1) Simply reading from the slides; (2) Too much information on the slides; and (3) Slides that are too cute.

To remedy those potential problems, follow these suggestions. Put only key phrases on the slides. They serve to help guide both the presenter and the participants along a logical path. Cover each point and explain or elaborate as necessary, but don't read what's on the screen. Slides that have more than a title and five lines need to be redesigned or divided into two slides. Over 30 words on a slide is seldom effective. Finally, in terms of avoiding cuteness, stick to simple designs and use dark print on white or very light backgrounds. Light text on dark is very hard to read. Use sans-serif fonts of at least 28 points. Keep graphics simple and avoid the graphics with motion which draw the eye from the text and quickly become tiresome.

Beyond projection slides, what else can you use as visuals? Physical models to simplify and demonstrate equipment use or other aspects of your training are often very useful. Use of a flip chart or whiteboard (chalkboard) can be a versatile support. Also, as mentioned earlier, samples or videos (only short ones in a two hour presentation) can be effective.

List any visuals you will make or props you need to bring in such as models, blank forms, etc.

9. Prepare questions for use as learning checks during training

Good adult learning theory says that you should never go more than five to eight minutes in lecture or demonstration before pausing to do a learning check. Write out some questions you plan to ask the trainees ***during the presentation*** to insure that (1) they heard you, (2) understood you, and (3) can apply that information. You can use ideas from item 3, but also add some more specific questions to ask along the way.

Questions come in two broad categories: closed and open. A closed question has a specific answer, such as "Which OSHA form is filled out to report an injury on the job site?" They're easy to construct and get short, right or wrong answers from the class and can confirm the learning. Open questions may have more than one correct answer and require the trainees to apply, reorganize or extrapolate their knowledge. An example would be, "What criteria should you use in hiring a new employee?" This type of question will take longer to answer and may allow several trainees to contribute as they add to whatever first response is given. *Remember, pause in your lecture or demonstration every 5-8 minutes to use one or both types of questions.* It keeps learners engaged and confirms their learning.

Write one or two questions you will use to check learning for each of the 5-6 points.

10. Plan group activities

There are a number of good reasons for using small group activities for trainees, even in a short training session. Adults learn from each other, and small groups facilitate that. People learn better when they are involved, and lecture or demonstration only do that minimally. The use of groups will vary the pace of the training and also encourage teambuilding – particularly helpful when your trainees work with each other on the job. Synergy can develop in a way that can't happen in a regular classroom. Even in a short training program, you will have time for a couple of group efforts – even if it's just a brief "turn to your neighbor and discuss."

Ask yourself if you want to assign different topics to each group or the same topic to each? (The former makes the outbriefing more interesting.) Be specific about how you want them to function. Do you expect them to choose a person to summarize and report out? How much time will they have? Etc. Spend some time moving among groups to answer questions and keep them on track.

Describe any one or two group activities you plan to use.

11. Starting the program

Decide what you'll do at the start of the class. In a session of only two hours, you will not want to spend much time with so-called "icebreakers." But since adults learn from others in the class and not just the instructor, it is probably worthwhile for both you and the trainees to get a sense of who is in the group and what experience they bring to share. Beyond learning about them (and them about you), you need to start with something relevant to the topic which will engage their attention.

Make a good first impression by being there early, welcoming them as they arrive, establishing your credibility with the topic, dressing the part, starting on time, and having all materials & visuals ready. If you are using a computer and projector, make sure to arrive in plenty of time to set up and test the operation. Also, have a "Plan B" in case the computer fails. Can you teach without it, can you get another unit or a quick response for tech help, or will you need to reschedule the session?

List at least four things you will do during the five minutes just before and just after class starts.

12. Closing the program & validating the learning

After you've finished covering your last point, you still have at least three things to do. These are: (1) summarize what you've covered during the two hours and how it applies to them; (2) give them a chance to ask clarifying questions; and (3) ask your own questions – written or oral – which will confirm that they have heard, understood, and can apply what you have taught them.

It's always good to have something meaningful for trainees to do near the end of a program. You may want to have them develop an action plan of what they will do with this information once they return to their regular jobs, or some other activity such as creating a job aid or working on another brief project which will help ensure transfer of training to the workplace.

Throughout the program you should have been interactively asking questions at least every 5 to 8 minutes, and this will tell you if the trainees were following your presentation and able to respond correctly about facts, procedures and concepts you covered. At the very end, however, you need a more complete validation of the learning that has occurred in your program. Earlier in this list you were asked to create questions which would confirm that the trainees have actually learned what you taught. This is an essential step in an effective training program, and should not be ignored or treated lightly. Create an oral or short written test using those questions. You should remember to allot the necessary time – perhaps 5 to 10 minutes – to complete this activity.

Finally, there are typically administrative details to wrap up at the end of the program, such as distributing program evaluations and handing out certificates of completion.

List the things you need to do to complete the session:

13. Prepare the marketing piece, as needed

Now that you have worked through the design of the training, someone may need to have information from you to publicize the event and encourage people to attend. Complete the following and provide it to whomever that is.

- Title of program.
- Time/Date/Location.
- Your name/affiliation/credentials.
- Describe the program in up to 40 words.
- In bullet point form, list what knowledge and skills the trainees will take away with them.

(End)