

# *The Challenge of Helping Adults Learn:* **Principles for Teaching Technical Information to Adults**

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The following is a set of basic principles that can guide the teacher in organizing instructional presentations for adult learners. The ideas are straight forward and not meant to be very elaborate - just presented to help you realize that the task of teaching adults can be made very effective if clearly conceived and presented.

## **PRINCIPLE #1**

### **TELL THE ADULTS WHAT YOU'RE ABOUT TO TELL THEM**

Probably the best place to start in planning an instructional presentation for a group of adult learners is to realize that you and the adults are working toward the same goal. Your goal is **not** to fool them or confuse them. Your goal is **not** to impress them with how smart you are. Your goal is to help them learn what you're about to teach. Doing something to enlist their help in getting this done is to your advantage. So, let's start with the most obvious. ***Start by telling the adults what you're about to teach them.***

This can be done in a number of different ways. If you've prepared a printed program or agenda for them, make sure that it's clear (stay away

from "cute" titles) and show them that you're concerned that they know what's in it by talking them through the schedule. Cover the main ideas of each of the events of the program.

As you tell the adults what they're about to learn, **make sure you really teach those things.** There's nothing quite so frustrating as a teacher who doesn't deliver what was promised.

An interesting way of letting the adults know what's about to happen is to prepare a simple "test" for them at the beginning of the program. Use the test to present questions on each of the main topics. Have the adults "correct" their own test by providing the answers on the back of the sheet. Or, have pairs of learners work together on the test. Unlike the typical test no one gets a grade on this one. This test is used to help the adults know what the program will deal with. The test lets the adults know what's going to be covered and can also be used afterward to let them know that they've learned the information.

***Let's try it!*** Turn to the next page of this handout and you will find a short test on the content of this handout. See how well you can do **before** you read the content. Then, see how the test helps you be better prepared for the content as you read it.

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**TEST**  
**Principles for**  
**Teaching Technical Information to Adults**

**1. Probably the best way to help adults learn what you'd like them to learn is:**

- a. \_\_\_ to speak slowly.
- b. \_\_\_ to use colorful slides.
- c. \_\_\_ to tell them what you're about to teach them.
- d. \_\_\_ to use a short test at the end.

**2. It's important to always organize the sequence of your presentation around your content.**

- a. \_\_\_ absolutely, the content is your guide!
- b. \_\_\_ sometimes, but there can also be other ways to organize the sequence of the content.
- c. \_\_\_ never, you should work from the advertised schedule!

**3. It's really hard to affect how much people will remember from your lecture.**

- \_\_\_ True
- \_\_\_ False

**4. Adults usually attend a class to:**

- a. \_\_\_ pick up some new information.
- b. \_\_\_ improve their understanding of something that concerns them.
- c. \_\_\_ learn some material that can be put to use.
- d. \_\_\_ reflect on what they already know so they can share it with others.

**5. A really good teacher:**

- a. \_\_\_ knows when to switch between being a learner and a being a teacher.
- b. \_\_\_ defines a clear distinction between him/herself and the adult.
- c. \_\_\_ sees him/herself only as a learner.

**6. The best way to conclude a presentation is to:**

- a. \_\_\_ tell the adults how to use the ideas presented.
- b. \_\_\_ review the major concepts that were presented.
- c. \_\_\_ have the adults discuss what they'll do with the information.

**(see last page for answers)**

## **PRINCIPLE #2**

### **ORGANIZE YOUR MATERIAL FOR PRESENTATION IN A LOGICAL ORDER**

The more organized you are as the teacher the easier it will be for others to learn from you. Sometimes the best way to organize technical information is to start with the beginning "stuff", proceed through the middle stuff, and conclude with the end stuff. However, this may not be the easiest way for the learners to learn your material. There are different ways to **logically** organize your material for presentation.

**Content Ordered** Look at your content and see how the concepts are built. Which ideas are foundational and which ideas are built on the foundation. The foundational material should be presented first to allow the learners to create their own foundation for later material. Sometimes it helps in your planning to start by thinking through the concluding ideas that you want to get across. Once you clearly understand how you will be concluding your presentation you can then work backwards until you uncover each previous idea. When you get all the way back to the beginning you're ready to start.

**Experience Ordered** If you know something about the background of the adults who are attending your program you may also know the sorts of experiences they've had that relate to your technical information. Start your planning by **identifying their relevant experiences** and then building on them. Present your content in an order which begins by clearly linking what you have to say/present to their own experiences.

**Interest Ordered** Identify the most interesting things you have to share and then organize your presentation to allow these interesting aspects to periodically emerge. For instance, if you would

like to get their interest at the beginning of the presentation make sure to start out with something that will capture their interest. Any time there is a break in the program and it is time to get started again, you can probably use a high interest item to get them back and tuned in again.

### PRINCIPLE #3

#### DON'T FEEL THAT YOU HAVE TO TELL THEM EVERYTHING

Many teachers are intent on telling the adult everything there is to know on the topic. This may be okay if the adult doesn't know anything, but that is seldom the case. Adults already know many things! So, how is it possible to tell them everything if they already know something? The answer - **tell them a bit, don't overdo it, and then create ways to let them tell you what else they need to know.** This is not an attempt to withhold information! No, it's an attempt to not overload the learner with information that they may not want or need.

Here's how it works:

- ✓ First, start by making a **short presentation**. Cover the main points, but don't get too detailed.
- ✓ Next, give the adults a **chance to discuss what you've just said**. Using small groups have them share their ideas/thinking with each other.
- ✓ Finally, bring everyone back together and **encourage questions and answers**. The session will now easily turn toward ideas that need further clarification, new ideas not previously presented, and implications drawn from the ideas. And, it will emanate from the learners attending the program.

This procedure is a much more efficient use of everyone's time since the **adults** are the ones

pulling the information from you and it is information that **they** specifically need/want to know.

### PRINCIPLE #4

#### UNDERSTAND WHAT YOU WANT THE ADULTS TO DO WITH THE INFORMATION YOU ARE PRESENTING

Before you begin your teaching make sure you understand what you want the adults to do with the information you have. Maybe this sounds a bit absurd but think about it for a minute.

- ✓ Do you want them to learn it for a rainy day?
- ✓ Do you want them to learn it so they can use it tomorrow?
- ✓ Do you want them to learn it to help others use it?

Once you know what you want the adults to do with the information you can decide on how to best teach it. Here are four levels to consider. Each level, like stairs on a staircase, builds on the previous one and leads you progressively higher.

**LEVEL 4**  
**Share Information**  
**With Others**

**LEVEL 3**  
**Use Information**

**LEVEL 2**  
**Understand**  
**Information**

**LEVEL 1**  
**Know**  
**Information**

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**Level 1** - They should *know* the information in case they need it in the future. This sounds like a college course. Maybe it is! A considerable amount of teaching is at this level. The "preferred method" for Level 1 is usually the lecture. A lecture for level 1 isn't bad but it can usually be greatly improved through visuals. At Level 1 a handout is essential since the adult will have it available in the future when they may need to know the information. Make sure there is time at the end of your lecture for questions so that everyone can leave with the "correct" information. However, don't be disappointed if few questions arise. If the adults are only learning for future use, Level 1 questions will probably appear in the future (when you are no longer available!). You may want to leave your name and address with them so that they can follow up with you at a time when they need to put the information to use.

**Level 2** - They should *understand* the information so that they can relate it to ideas in other areas. Level 2 is more than just remembering - it's also *understanding* the information. Though the adults may not have a particular application for the information, there may be other areas in which these same ideas can be most useful for them. Make sure you provide ample opportunity during your presentation time to allow them to discuss the ideas and concepts with each other in small groups. This

will allow them to see how each other may be trying to use the information - which can greatly improve their own understanding. Often the adults will shy away from asking a question in front of the entire group but will ask the question in the "privacy" of a small discussion group. Again, a handout can greatly help the learner to understand the information. Also some form of Note Taking Guide will really help. The main points from your presentation can be included in the Note Taking Guide with space provided for the adult to write in their own comments.

**Level 3** - They want to be able to *use* the information so they can put it to work for them. This is probably the level that is the most fun for the teacher. When you've got a group of adults who really want to put your information to immediate use, you will find that your attention moves away from "how can I get them to learn it" and focuses more directly on "how can I get out of their way so they can deal directly with the material." So much of teaching seems to be focused on tricking the adult into learning something that this level sometimes comes as a surprise to us. Tricks are not needed to help adults learn when they are wanting information that they can put to use. The adult, though, may become a bit impatient! The adult learner may not want to be lectured at but instead want to try to immediately put the information to use. So, be prepared! This is a

great time for a "hands on" demonstration. Try to do a lot of showing at the beginning rather than telling. Let the adults see the information being put to use and then have them do it. You may have to create some simulated opportunities for doing this. Once you've given them an opportunity to see and to do, **then** it's time to talk. First in small groups so that everyone can have a chance to share their thinking. Then, in the large group so that you can give specific technical answers to their technical questions. Handouts are essential, especially those that document the specific steps of doing that were demonstrated and tried during the program. Diagrams and pictures in the handouts can often spell later success as they continue to make application after they return home.

**Level #4** - They want to be able to **share these ideas with others** so that others can know about it. If your adults are wanting to learn at this level they have now become your peers! Your task should be more focused on helping them be able to communicate in the same ways that you are able to. It stands to reason, of course, that as a peer they already have a good grasp of the technical information and have already been able to put it to use. If this is not the case, maybe they really aren't at Level #4! Let's assume, however, that they know the material and have put it to use prior to this program. They really are at Level #4 and now they want

to be able to help others know about it. You should focus your presentation around case studies and problem scenarios. Give them a problem scenario to solve that you have run into in the past. It often helps if the problem scenarios have been prepared and printed ahead of time. Divide up the adults into small groups and have them tackle one of the problem scenarios. After ample time for small group discussion, have them share their solutions and approaches in the large group. **Have all groups work on the same scenario** so that when the large group sharing occurs everyone knows what is happening. Try and have a selection of problem scenarios available for them. Some scenarios should focus on specific technical information aspects ("What types of information should you provide if the problem is ...") and other problem scenarios should focus on how to help people learn the information ("What should you do if the person doesn't understand the concept of ..."). Provide a time when you ask the adults to share their experiences in helping others learn this type of information. What works for them? What things should be avoided? Be ready to describe your own successes and failures so that others can learn from your experiences. Don't make yourself the center of attention but try and turn questions around that are directed to you so that the adults have the opportunity to respond to each other's questions.



It might seem that transfer can be best accommodated when we stick closely to our plan for presentation. We assume that we can then plan carefully ahead of time about how to make the transfer. But what if we allow the adults to ask questions during the program? Or, what if topics and ideas are brought out that we hadn't planned for? Is this bad or can we still help the adults to make the transfer?

Probably the easiest way to have transfer occur is through a series of three very obvious questions that can be part of the concluding discussion. The key is that you must ask them at the right time and in the right way. They are:

Question #1 -

**What are the key ideas that were brought out during this session?** (Identify)

Question #2 -

**From your own perspective, why are these ideas important?** (Analyze)

Question #3 -

**How will you be using these ideas in your own situation?** (Generalize)

If done well, you will spend the first half of your final discussion by going back and forth between Questions #1 and #2. Start by asking someone to **identify** something from the session and then have them or someone else **analyze** why it was important. Try and stay tuned in, interjecting every once in awhile to keep things going smoothly. Then, when things quiet down a bit, again ask Question #1. This process is repeated until the main ideas of the session, **from the adult learner's perspective**, are brought forward. When it's time to finally wrap everything up we move to Question #3 - "How will you be using these ideas in your own situation?"

This last question sets the stage for the transfer of learning. Hopefully all of the adults will have a chance to share their ideas on how they will be making use of the information. Sometimes this can be helped along by moving through the group and giving everyone an opportunity to speak. The usual effect of this final sharing of insights is very powerful, with the group strongly reinforcing all of the many things that were learned. In fact, it is often the case that the instructor learns about many things that were learned that weren't realized nor planned for. What a great way to end a program!

**IDENTIFY**     $\Leftrightarrow$     **ANALYZE**



**G E N E R A L I Z E**

Answers to the test:

1. C    2. B    3. F    4. All    5. A    6. C

