

DOCUMENT RESUME

ED 482 431

CE 085 558

AUTHOR Levine, S. Joseph
TITLE The Challenge of Helping Adults Learn: Principles of Teaching Technical Information to Adults.
PUB DATE 2001-00-00
NOTE 9p.; One of a series of workshop handouts made available by LearnerAssociates.net.
AVAILABLE FROM For full text: <http://www.learnerassociates.net/workshop/adltlrn2.pdf>.
PUB TYPE Guides - Classroom - Learner (051)
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS Adult Education; *Adult Learning; *Classroom Communication; Course Organization; Learning Activities; Learning Strategies; Teacher Clarity; Teacher Student Relationship; *Teacher Workshops; *Teaching Guides; *Teaching Methods; *Technical Education; Transfer of Training

ABSTRACT

This workshop handout presents six basic principles intended to guide teachers in organizing instructional presentations for adult learners. The section on principle one tell the adults what you're about to tell them suggests that teachers describe what they will be teaching and then teach those things. The section on principle two organize your material for presentation in a logical order describes the following three ways to logically organize materials: (1) by content, for ideas which are foundational; (2) by experience, to clearly link materials to the relevant experiences of the audience; and (3) by interest, to keep the audience focused. The section on principle three don't feel that you have to tell them everything suggests telling the audience a bit and then creating ways to let them tell you what else they need to know. The section on principle four understand what you want the adults to do with the information you are presenting describes the following four levels, each of which builds upon the previous one: know information, understand information, use information, and share information with others. The section on principle five know when to teach and when to learn suggests that teachers and students can learn from one another. The section on principle six help the adults transfer the concepts to their own situation describes the importance of the transfer of learning. (MO)

The Challenge of Helping Adults Learn: Principles of Teaching Technical Information to Adults.

S. Joseph Levine

BEST COPY AVAILABLE

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

S. Joseph Levine, Ph.D.
Michigan State University
levine@msu.edu

One of a series of workshop handouts made available by LearnerAssociates.net'

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.

¹This Workshop Handout has been made available for general use by LearnerAssociates.net. Permission is granted for non-commercial reproduction of this Handout for educational use as long as the Handout is made available in its entirety, full credit is given to the source and the author, and any fee associated with the dissemination of the Handout is limited to recovering duplication costs with no intention of making a profit from its sale.

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

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.

PRINCIPLE #5

KNOW WHEN TO TEACH AND WHEN TO LEARN

Many teachers assume that the reason they're up in front of the group is because they - and they alone - are the important ones and are the only ones that have something valuable to say. Yet, we know that a key component in learning is for the learner to have an opportunity to try out new ideas by saying them to others - saying them out loud. If we control all of the "talking time" and not let the learner share the "stage", we will be removing a valuable component of the learning experience.

Sure, one part of our responsibility as a teacher is to be prepared to tell things to learners -

"I know something that I want you to know."

However, the other part of our responsibility as a teacher is to be establish the opportunity for learners to tell things to us -

"You know something that I'd like to know."

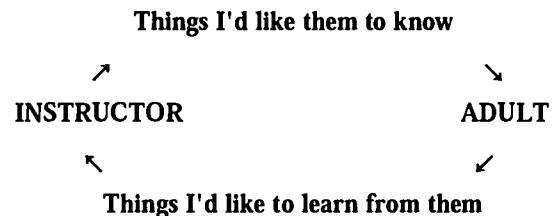
This later position is one that is often ignored by the teacher without really thinking about it. It's important for learning, almost essential, that the learner feel that he/she is an important part in the process. One way to have this happen is for the teacher to learn from the learner - and vice versa. By demonstrating our willingness to listen to the learner (learn from the learner) we establish a sense of reciprocity that is essential for learning.

"Between the two of us there's got to be some new insights - let's share what we know."

Sounds rather confusing!! "How can I be the expert if I'm going to learn from them?" Or,

"I'm the expert, what can they expect to teach me?" No one said that the content that each of you will teach and learn must be the same. The key is that you, as the teacher, can make the adult feel a lot more willing to learn if the adult feels that they are being listened to. Learning is enhanced when it is seen as a reciprocal relationship.

Make sure you provide ample opportunities for the adults to do some talking. And, listen when they speak. Assume that their questions are all good and work to give each questioner your full attention through your response. Try jotting down your thoughts as the adults are talking. Once written down you can go back to listening rather than having to interrupt them before you forget what you want to say. Try to provide opportunities for different people to speak. Don't let just one or two control the discussion.



PRINCIPLE #6

HELP THE ADULTS TRANSFER THE CONCEPTS TO THEIR OWN SITUATIONS

A real challenge for the teacher of adults is to get the adult to make the shift in their mind from the classroom to their own situation. This concept, often referred to by educators as "transfer of learning", is the essence of what teaching is all about. If we can't stimulate our learners to make this transfer of information, to generalize to their own situation, then there really isn't much point in wasting their time listening to us.

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



GENERALIZE

Answers to the test:

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



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: <i>The Challenge of Helping Adults Learn: Principles for Teaching Technical Information to Adults</i>	
Author(s): <i>S. JOSEPH LEVINE</i>	
Corporate Source: <i>Dept. of ANR Education & Communication Systems 408 Agriculture Hall Michigan State University East Lansing, MI 48824-1039</i>	Publication Date: <i>2001</i>

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

The sample sticker shown below will be affixed to all Level 2A documents

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 1



Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Level 2A



Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

Level 2B



Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: <i>S. Joseph Levine</i>	Printed Name/Position/Title: <i>S. JOSEPH LEVINE / PROFESSOR</i>		
Organization/Address: <i>408 Agriculture Hall Mich. State University East Lansing, MI 48824-1039</i>	Telephone: <i>517-355-6580</i>	FAX: <i>517-353-4981</i>	Date: <i>10/13/03</i>
	E-Mail Address: <i>levine@msu.edu</i>		



(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse: Cheryl Grossman Processing Coordinator ERIC Clearinghouse on Adult, Career, and Vocational Education Center on Education and Training for Employment 1900 Kenny Road Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: