

## How People Learn

People learn with all their senses. Few of us can totally focus on one sense for very long without stimuli from others affecting us. For instance, right now you are reading, using your eyes. The meaning of the words is part of the message but the **Size**, **font**, and *format* affect the tone of the message. If classical music is playing you're probably getting certain feelings while reading which differ from how rock 'n roll would affect you. A bakery upwind, trying to cool off some fresh cinnamon rolls, might affect the written message, as would a diesel truck idling outside your window. Sitting in an overstuffed easy chair with your favorite slippers on and your cat or dog cuddling against you might give you a different feeling than reading this in the bed of a truck that's bouncing down a gravel road on a cold misty day. Yet the written word is much simpler than speech.

When one person speaks to another only about 15% of the message received is a result of the meaning of the words. The other 85% is a result of other stimuli like tone, volume, body language and especially perspective. Every human being has their unique perspective which results from recent activities and interactions, as well as every previous occurrence in their life.

Perspective is important for both teacher and student. Perspective radically affects every step in the following sequence which transfers an idea from one person to another:

I decide to tell you a certain idea.

This thought is reduced to whatever words I think best represent it.

These words are spoken with added tone, emphasis and body language.

Some of these words are heard. Some body language is received.

The message heard is reduced to your best interpretation.

Clearly, verbal communication is a complex and ambiguous system, but it does get messages across, especially when coupled with other learning mediums.

People enjoy a lot of mixed stimuli and most of us learn at these approximate rates:

Smell . . . . .	3%
Taste . . . . .	3%
Touch . . . . .	6%
Read . . . . .	10% (i.e. 10% of our learning is by reading)
Hearing . . . . .	20%
Seeing . . . . .	30%
See and Hear . . . . .	50%
What is discussed . . . . .	70%
What we experience . . . . .	80%
What we teach someone else . . . . .	90%

It can be assumed from these statistics that visual aids and body language can be extremely effective teaching supplements in addition to talking to someone. Giving someone printed matter that reveals the material, especially with drawings, can be a powerful way to enhance learning. Printed follow-up material in a fresh context, but the reiteration of key points can have a pronounced effect on long term retention.

Our state of mind always affects our capacity to learn. Compare the Smiths and Jones. The Smiths just drove 2,000 miles in a rainstorm, have been eating in fast food restaurants for days, had a couple of flat tires,

and all eight kids are somewhere between crabby and neurotic. The Jones left home an hour ago as the storm broke and the triple rainbow over the mountains radiated a surrealistic glow. Eagles soared. A mountain lion darted across the road in front of them. The Jones kids have never been so thrilled about cool nature stuff in their whole lives.

In this situation the Jones might provide you some early clues that they are eager to learn all about Leave No Trace. They might really appreciate some of the more subtle points of why we are so careful out there. The Smiths on the other hand need some positive reinforcement and need to be handed information in small bite-sized pieces. It's obvious that you need to keep things simple and give them some follow-up printed matter to help them remember the basics. You might even suggest that they come by the ranger station again after they rest up from their (epic) journey.

More subtle than the differences between the Smiths and Jones are the effects of our own biological rhythms. We all have our ups and downs and our level of alertness varies accordingly. Some of us are more alert late into the night. Sometimes we are more "up" for a few days or "down" for a few with no obvious cause. Though we aren't always aware of it, our mental capacities fluctuate wildly with our biological rhythms and we tend to adjust our learning strategies accordingly.

As an instructor the key is to recognize the emotional state of your prospective students and tailor the message so it will be best received.

## **Preparing a Class**

### **Set Goals:**

Decide exactly what you want to see your students do to indicate success. (See "Outlining a Class" for examples.) It is critical that an educator's primary focus be on what the student is supposed to do, not just at the end of the class, but forever.

### **Research the Topic:**

Read background materials that will help you to understand the topic. Read books and magazines. Consult with experts. And in particular, be sure to obtain hands-on experience. People enjoy learning from folks who have been in their shoes.

### **Make an Outline:**

Get your thoughts organized in list form. Try to sort them into general categories. It's a good sign if you have too many ideas. You'll have to judge for yourself which material is really important to the class and which you can do without. Remember, covering fewer ideas with less clutter will usually result in better retention of your material.

### **Develop Training Aids:**

Look for ways to graphically explain key concepts. Good training aids can really make a presentation more effective. Be cautious though, sometimes it's easier to display a minor point; but you need to emphasize your main point. Look for ways to display your main points visually. Some examples of training aids are:

- An outline on a blackboard with key points highlighted
- Drawings
- Maps
- Working models (model campsite at the ranger station or office)

Scaled models  
Slides  
Videos

**Seek Advice:**

Ask a peer to review your plan. In particular ask what can be deleted while still accomplishing your goals and whether any points were less than crystal clear. The plan is for your presentation to be an enjoyable one that gets the student excited to learn more about the topic you've presented.

## Outlining a Class

**Introduction:** Greet your audience. Trade introductions. Ask for a little background to simultaneously gauge abilities and display your concern for them as individuals. The social courtesies you render as they get their first impression of you and your organization are critical to their reception of your message.

**Motivator:** A brief explanation or story can really motivate people to listen to what you have to say.

**Objectives:** Explain specifically what you expect students to be able to do after your class, for example:

*After my presentation, you should be able to instruct agency staff on what is expected of them regarding Leave No Trace. You may use cue cards with your own notes but are expected to minimize dependence on notes. It is expected that your briefings will be effective enough to impart the skills and ethics needed in that environment.*

**Outline:** You need to organize your entire progression on paper first. Look for natural progressions and write down your ideas for how to progress from one topic to the next (transitions). For example:

*I. Teaching Ethics while teaching skills. (5 min.)*

*Your personal concern must be obvious.*

*Explain "why" rather than presenting rules.*

*Nurture judgement that fits situations.*

*Be personable: use names; look folks in the eyes.*

*Transition: These tips should help you be effective at teaching the following skills.*

*II. Campsites. (5 min.)*

*200' from water and trails.*

*Use "hardened" campsites if they're available.*

*Tucked away in the trees.*

*Transition: Speaking of trees, let's talk about firewood.*

*III. Fires (10 min.)*

*Firewood is only collected from ground, Explain habitat and visual impact concerns.*

*Use scarred sites in high-use areas.*

*Mound fires or firepans.*

*Keep them small.*

*Douse 'em good with water before going to sleep.*

*Transition: Any questions on fires? Let's continue on water then.*

*IV. Water (5 min.)*

*Treat all drinking water with iodine or by boiling.*

*Don't introduce germs into the water source:*

*Clean dishes 200' away.*

*Bathe using a pot for a shower source – 200' away from the water source.*

*Clothes – undergarments should not enter sources of drinking water.*

**Review Questions:**

1. What advice do you have for how to help instill ethics in user groups?
2. Why would you only explain a mound fire OR firepan, not both?
3. Why can't I wash my old dirty underpants in the creek?

**Practice:**

To figure out how long it will take to explain your key points, rehearse your presentation. Have an observer time the different parts of our talk so that you know where all of the time is going. Rehearsing can improve your timeliness, smooth your delivery, and can help you to excel the first time you present your topic to the public.