

## Film Guide

### *INFORMATION PROCESSING*

30 minutes, color, 1971

You are invited to a cocktail party. Come join Dr. Donald Norman and David Steinberg as they demonstrate some fascinating examples of how we obtain and use information. You will have to **pay very careful attention** because some of the examples come and go very quickly.

Can you attend to more than one thing at a time? Every moment we are bombarded with too much information (**information overload**). Try the examples given during the film. How do we sort out that which is useful? **Selective attention** is the name for focusing on only certain stimuli. Can you give an example of how some things stand out more than others? In some situations your attention is drawn to irrelevant stimuli. A magician's stock in trade is getting you to see only what he wants you to see.

How is your memory? If it is like mine, it can stand improving. Things we need to remember for a moment are a part of **short term memory**. Telephone numbers are an example. To get information from short term memory to long term takes concentrated effort. Active techniques are needed. **Rehearsal** is one method: repeating and going over the information. Well organized material is easier to remember. Dr. Arthur B. demonstrates the use of mnemonics, an aid to memory. During the film you will get a chance to test your memory.

Once you have something in **long term memory**, how do you get it back? Retrieval is influenced by the factors used to get information into storage. If the information is not tied to other information through some type of organization, it is very difficult to bring back out. Meaningfulness is essential. Numbers are very hard to remember since they have no meaning. Ever have a problem remembering for a test? Multiple choice tests are relatively easy since you only have to recognize the correct information. Short answer or essay questions require recall rather than recognition. **Overlearning** is called for to remember information for recall tests.

Do you recall where you were the day the space shuttle exploded? What were you doing? It is impossible to remember all of the information about events in the past. However, with a few facts we often are able to reconstruct the situation. **Refabrication** is the process of moving from a few facts to reconstructing the situation. But what we put together is slanted by our views as well as selective recall. What we put together is based on facts but is somewhere between truth and fiction.

**Problem solving** is a process we use all the time. How do you problem solve? One thing we often do is to generate a number of possible solutions and then start evaluating the solutions. Here is a problem for you:

A    EF HI KLMN        T VWXY  
  BCD G J        OPQRS U

Which line does the Z go on?  
Why?

### **LEARNING OBJECTIVES**

Summarize what you have learned about how humans process information and give examples first from the film and then from your own experience of (1) information overload, (2) selective attention, (3) short term memory, (4) rehearsal, (5) long term memory, (6) overlearning, (7) refabrication, and (8) problem solving.