

Examples of Metamemory Memory Strategy Interview Items

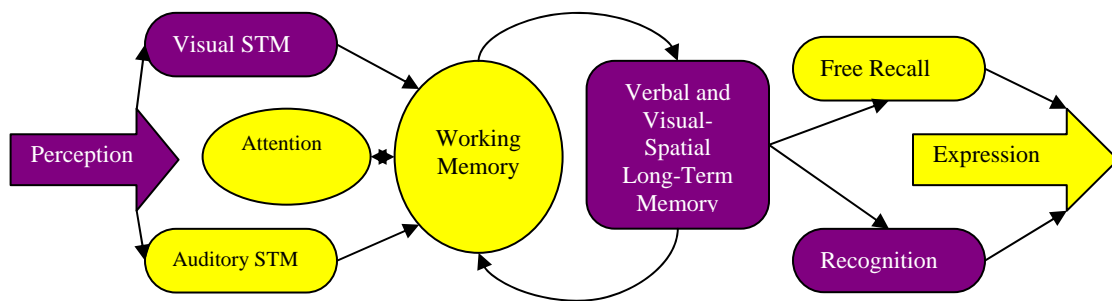
From Milton Dehn, Ed.D., NCSP

1. Tell me what you know about how memory works.
2. What are the different kinds of memory that we have?
3. Do we have any control over how well our memory works?
4. Tell me about your memory. Do you have good memory?
5. Which kinds of memory are strong and weak for you?
6. When you take a test in class, how often do you have a lot of difficulty remembering something you thought you knew?
7. Tell me about the methods you use when you are trying to memorize information.
8. Do you use different methods for different situations? Explain.
9. How do you know when you have studied something long enough that you will remember it?
10. If you want to remember something for a long time, which of your memorization methods work best?
11. Do you ever try to picture things in your mind so that you can remember them better?
12. Do you ever test yourself when you are trying to memorize something?

Example of Summary of Memory Functioning Milton Dehn, Ed.D., NCSP

Learning, Memory and Processing: This subsection will trace Jane's learning, processing, and memory functions in a flow of information from perception (input) to expression (output). After information is perceived (see Figure 1) we must focus attention on it if we are to learn and remember it. The information is then briefly stored in our short-term memory (STM). Short-term memory can be divided into auditory and visual-spatial components. Working memory, which is conscious processing of information, becomes involved along with short-term memory. When we hold and process material in short-term and working memory we create more of an opportunity for the information to become encoded and stored in long-term memory. Working memory is also involved in the conscious retrieval of information from long-term memory. Long-term memory can be divided into verbal and visual-spatial storage. Recalling information from long-term memory occurs through free recall or recognition. Regarding how these processes affect learning, auditory short-term memory span is related to vocabulary learning, and adequate working memory capacity is particularly necessary for reading comprehension, mathematics problems solving, and written expression.

Figure 1: Jane's processing and memory strengths and weaknesses.
Weaknesses are in yellow. Strengths are in purple.



Jane's visuospatial perception and processing appear to be average. Her overall auditory perception and processing also appear to be average; however, she has difficulty recognizing incomplete stimuli, such as when only part of a word is spoken. It appears that Jane is capable of adequately attending to incoming information. That is, she seems able to focus her attention and divide it (including filtering out distractions) but it's not clear how long she can sustain attention. Jane's ability to retain information in short-term memory is variable. Her visual-spatial short-term memory is average (see Table 1); whereas, her ability to retain auditory content is weaker, closer to low average. Her working memory capacity, which also controls attention and strategies, appears to be in the low average range. When her short-term memory and working memory are put to work learning new information, she performs adequately as long as the learning task is structured, includes corrective feedback, and includes a visual component. It seems that Jane can adequately encode information into long-term memory, although it is unlikely that she is attaching any cues or making any associations that would facilitate retrieval. Jane's ability to store/retain newly learned information in long-term memory appears average. That is, she does not forget material that she has learned any faster than the average child her age. However, she has extreme difficulties with verbal retrieval, and this is the major hurdle in her processing of information. Free recall is very difficult for her, she does better with cued recall, and she does even better with recognition. The fact that she can recognize information means that she knows it and remembers it, in spite of the fact that she can't retrieve it very well on demand. It's not clear how much of her verbal naming and expression difficulties are due to her verbal retrieval deficit but the deficit clearly plays a role.

Training Procedures for the Keyword Mnemonic
Milton J. Dehn ©Wiley Publishing 2008

1. During the first stage, the acoustical link stage, the learner selects or is given a concrete word (the keyword) that sounds like the stimulus word. For example, in learning the Spanish word “pato” (duck), the learner decides that it reminds him or her of the keyword “pot”.
2. In the second stage, the learner is provided with or creates an image of the keyword interacting with the appropriate definition or response. To remember that “pato” means duck, the teacher or student creates an image pairing the keyword pot with the meaning of the word; for example, an image of a duck with a pot on its head. When teachers are creating images, they should show an actual picture, instead of just describing the image. Younger children should be encouraged to draw the image; with older children, it is usually sufficient to have them visualize the image.
3. When retrieving, students are directed to think of the keyword first (e.g., pato sounds like the keyword, pot). Then try to recall images containing the keyword. When the image is retrieved, the association in the image should lead directly to recall of the correct response (Mather & Wendling, 2005).

For example, here are the steps involved in creating and retrieving a mnemonic that will allow a student to remember that Madison is the capital of Wisconsin:

1. Create the keyword for the state; Wisconsin sounds like *whisker*.
2. Create the keyword for the capital; Madison can be recoded as *mad*.
3. Create a picture of a man who looks mad because someone is pulling his whiskers.
4. When retrieving ask, “What is the keyword for the state, Wisconsin?”
5. Direct the student to remember the image with the keyword (*whisker*) in it.
6. Direct the student to focus on what is happening in the picture. This should lead to the other keyword, *mad*.
7. Ask the student what *mad* is the keyword for, and the student should retrieve Madison.
8. Practice steps 4 through 7 several times until the student proceeds through the steps without prompting and responses are quick and firm.