

Project Memory: Making It Work!

For fans of fashion and reality television, the title of this article should ignite some associations – specifically, you might think of Heidi Klum’s popular series, Project Runway. On this show amateur designers compete to create outfits under strict time constraints and against fierce competitors. The designers are not without support, of course. Their mentor, Tim Gunn, visits the work room, offers suggestions, and departs with the mantra, “Make it Work!”

When it comes to memory, the same mantra is appropriate; good memory means *making it work*. In 1972, Dr. Gus Craik and Dr. Robert Lockhart, cognitive psychologists at the University of Toronto, published an important article proposing a model of memory that diverged

from previous conceptualizations. Their **levels of processing approach** viewed memory as an *active* process, rather than a *passive* one. Furthermore, it diverged from ideas that memory is best conceptualized as a series of storage units, where information moves from short-term to long-term storage provided it sits in short-term storage long enough. Craik and Lockhart challenged this assumption, arguing instead that merely holding information in mind does not guarantee that you’ll remember it later on. What was more important for good memory, in their opinion, was what you *did* with that information – or how you processed it. They went further to assert that the *more deeply* you processed the information, the stronger your memory for that information would be.

Understanding the levels of processing approach requires a brief explanation of the Craik and Lockhart experiment. Students were asked to remember a series of words. Some students were asked to focus on what the words looked like; for example, by examining the structure of the letters or the fonts on the page. This strategy was defined as **structural processing**. Others students were asked to engage in **phonemic processing** which meant thinking about the sounds of the words or generating other words that might rhyme with them. A third group engaged in **semantic processing**. Students in this group focused on the meaning of the words.

In doing so, they were encouraged to make meaningful associations with knowledge they already had (similar to my ploy of asking you to remember that *good memory requires work* by associating it with Project Runway, a show that has meaning for some of you). When it came time to test their memory, the group that had pondered the meaning of the words outperformed the other two groups by a long shot (not a statistical term,

but it drives the point home)! Based on these results, Craik and Lockhart explained that information can be processed at different levels. Merely thinking about what a word looks like, or how it sounds, is a **shallow** form of processing that does not bode well for later recall. Thinking about the meaning of words represents **deep processing** and guarantees a better chance of remembering the information later on.

Psychologists have long known that memory strategies, called “mnemonics,” are extremely effective in

enhancing memory by creating meaning. According to research, older children are more likely than younger children to use some form of memory strategy when try-

adults – fail to use *effective* strategies. For example, many students study by reading material over and over again; this approach, called **maintenance rehearsal**, is ineffective for recalling information over time. Simply reading, or repeating something, over and over is akin to