MENTAL NOTES

A mind expanding newsletter from Mark Zust, The Perceptionist

Meaning = Memorability

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Last month we explored how the brain "encodes" information, that is, the brain decides in a few milliseconds whether the information should be discarded or if it is useful and worth retaining as memory. This is where meaning comes in. Molecular Biologist and brain researcher Dr. John Medina posits that the more elaborately we can encode information at the moment of learning the stronger the memory. To do this our brain needs to link the data to meaning. For instance, if you have a grocery list of ten items, with apples being item #10, you could just repeat the items in your mind and link them to the numbers. This is often how we memorized formulas, dates and other minutia for school exams. This works, usually just long enough to get the answers down, and then the stuff is out of our heads, usually for good. Now, try imagining your Mom's sweet, steaming apple pie, the aroma, the tangy apples laced with cinnamon and you standing in front of the pie, holding up a rating card with "10" for the heavenly dessert. Chances are good that you'll remember apples on the list, probably forever. It may seem counterintuitive, but research at Harvard, MIT and dozens of other institutions in the last five years show that by making an encounter with data MORE elaborate and complex it is actually easier to remember it in the short term and even the long term. Going a step further, if you can personalize the data (not just any apple pie, but your Mom's killer dessert) makes the encoding practically bulletproof. That's right - more complexity means greater learning and stronger memories. And the more a learner focuses on the meaning of the information, the more elaborately the encoding is processed, So when you are attempting to drive home important data to your brain's memory systems, be sure that you understand exactly what that information means. This has even greater significance if you're trying to share this information with someone else. You can use examples that clarify the concept and be sure to ask follow up questions to confirm that the recipient knows what the information means.

Examples improve understanding and retention

Why do examples work? They take advantage of the brain's tendency toward pattern matching. Information is processed more readily if it can be immediately associated with related data already present in the learner's brain. When we provide examples, this is the cognitive equivalent of creating more "handles" to the "door" which the brain accesses in making connections, encoding data and remembering.

Quotable: "You know, the face is familiar, but I can't quite remember my name."

Anonymous

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