

The Business Brain

How context helps you retain content

Monday, October 25, 2010

SUSAN PINKER

It's 5 p.m., you have a critical presentation tomorrow and you've just hit a wall. Fatigue and overwork are in the background, low-level anxiety in the foreground. Specifically, you're worried that once in the hot seat you'll forget some key points and be left standing mute before clients and managers.

What should you do? Stay at your desk, coffee in hand, and keep on plugging? Take your laptop to Starbucks or Tims and work there for an hour? Wander over to the conference room and do a dry run? Or go home for dinner, then return to the project later at the dining room table?

Most of the time, the answer is all of the above. If you can't predict the exact conditions under which you'll have to perform, switch around the environments in which you prepare.

Psychologists have long known that place matters to immediate recall. If we need to know something right away, we retain and recall information best when we're put to the test in the spot where we learned it.

One classic experiment tested how environment affected scuba divers' memories. Could they remember new material better on land or in the water? British psychologists Alan Baddeley and D.R. Godden discovered that it depends on where the divers learned it: Those who heard new information while they were six metres below the surface recalled more when they were under water. And those who learned the words on land remembered more on land. But here's the catch: There was only a four-minute gap between the time the divers learned the information and when they were tested.

When there's a delay between preparation and recall, switching among multiple environments when you learn something helps lay down the complex neural networks you'll need to retrieve the information later.

That's what psychologist Steven Smith, at Texas A&M University, and his colleagues discovered. They taught a group of university students a list of new words, either in repeated sessions held in the same room, or switching between two dramatically different environments, one a windowless classroom, the other a modern space, overlooking a courtyard. They found that varying the rooms produced a 30-per-cent increase in performance.

Why might this happen? Long-term memory is bolstered by having to make sense of a pastiche of contrasting material (the subject of last week's column). Cognitive scientists believe that varying the setting in which you're trying to master new information aids your memory by adding a host of contextual cues that boost your recall – the conversation of co-workers near your desk as you drafted your sales pitch, the flickering light in the conference room where you practised your presentation, the smell of fresh coffee in the café when you gave it one last review.

The common thread is variation. Rich sensory details are more than a distraction – they help build neural scaffolding. With each change of scene, the features of a particular place get filed away with the information that you're learning, much like a website with multiple links. Diverse connections make a site easier to find if you don't have an exact Web address in front of you.

Similarly, if you can't predict the exact room and conditions under which you'll have to strut your stuff, preparing in a variety of locations means that you'll have lots of cues to help you call up that information, exactly where and when you need it.

*Susan Pinker is a psychologist and author of *The Sexual Paradox: Extreme Men, Gifted Women and the Real Gender Gap*.*

©Copyright Susan Pinker 2010