The Reticular Activating System

Part of the problem with people's ability to learn and retain information is physical and hereditary. It is because of a switch in your brain called the Reticular Activating System, and most people are unaware it even exists. I speak all over the world and have been asking my audiences for 20 years if they know what the Reticular Activating System is and 99 percent of the attendees have no idea that it exists. The Reticular Activating System does not just impact only a few people; it controls and dominates every one of them but certainly in different ways and on different levels.

The Reticular Activating System plays a significant role in determining whether a person can learn and remember well or not and also whether they are highly motivated or bored easily. It is a loose network of neurons and neural fiber that is connected at its base to the spinal cord and runs up through the brain stem to the mid-brain. It is the center of control for other parts of the brain involved in learning, self-control or inhibitions and motivation. In short, it is the attention center of the brain, and it is the switch that turns your brain on and off. When functioning properly, it provides the connections that are needed for the processing and learning of information, plus the ability to stay focused on the correct task.

If the Reticular Activating System doesn't stimulate the neurons of the brain as much as it should, that is when people have difficulty learning, poor memory, lack of attention or self-control. If the Reticular Activating System over stimulates the brain, then that is when people become hyperactive, talk too much and become too restless. The Reticular Activating System must be activated to normal levels for the rest of the brain to function as it should. That is why many people are prescribed Ritalin and other such stimulant medications because it helps control the amount of stimulation to the brain.

The Reticular Activating System is best known as a filter because it sorts out what is important information that needs to be paid attention to and what is unimportant and can be ignored. Without this filter, we would all be over stimulated and distracted by noises from our environment around us. As an example, let's just say you were a mother who has a baby sleeping in the next room, and you live right next to a busy airport with lots of loud noise from jets taking off and landing. Despite the constant roar of the jets and other noise, you will hear your baby if it makes even the smallest noise in the next room. The Reticular Activating System filters out the airport noise, which is unimportant to you and keeps you focused on your baby, which is the "Most important" thing to you. The Reticular Activating System is like a filter between your conscious mind and your subconscious mind. It takes instructions from your conscious mind (like "*I need to hear my baby*") and passes it on to your subconscious mind, which becomes diligent and alert to your request.

In the world of learning, the Reticular Activating System is like a switch in your head that turns on and off based on how much telling tension or self-talk you have going on inside your head. If the switch is open, you can retain information easily, and if the switch is closed, you cannot. If you are sitting in a seminar bored because the person speaking is not engaging enough (your brain is not stimulated enough), your Reticular Activating System will turn off and treat the person as irritating background noise, just like the noisy airport in the previous example. We will still see the person speaking and hear their voice, but we will not retain the information.

I truly believe that if tested, we would find that many of the people with a GPA under 2.50 have some level of ADD or ADHD that is impeding their ability to do well in school, and both are tied to the Reticular Activating System. In other words, I think they are smart enough, but they probably don't test well because they cannot retain information and recall it upon command during tests (due to their Reticular Activating System).

The ability to retain information has nothing to do with how smart you are; it simply means you were a member of the lucky sperm club. If you look at people who did real well in school and had great grades, you can be

almost certain that at least one of their parents did as well, if not both. I know people who never studied, yet they got straight "As" and in most cases, it was true of their parents as well. Those people have the gift of genealogy passed down through the family chain and their gift is a great Reticular Activating System that allows the free flow and retention of information. You cannot change your gene pool at this point because you have what you have, but you can choose how you handle what you have by knowing more about the brain and how it works.

I will give you a couple of examples of how the Reticular Activating System may have impacted you. Remember sitting in a classroom for an hour? You are almost certain the teacher was there because you could see them walking around and you could hear their voice, even though you are not certain about the message. You thought you were listening because you could see them and hear their voice. However, at the end of the class you got up, walked out the door and you have very little, if any, memory about what you learned. That is because if the teacher was not engaging enough to you, you disengaged and you began to daydream. You went to a happy place and thought about your upcoming date this weekend, your new car, or about an idea you had for a company you would like to start some day. Daydreaming is "self-talk," which shuts the Reticular Activating System off and makes it difficult for you to retain what the teacher is saying.

I will give you another example. Have you ever driven down a freeway on a sunny afternoon, daydreaming until you awaken suddenly after five minutes realizing that you missed your exit? You don't remember cars passing you or if you passed other cars, and you don't remember what was on the radio. It should terrify you that you are a 3,000-pound missile flying down the freeway at 60 miles an hour, and you have no memory of the last five minutes of your drive. How can that possibly be? It's because day dreaming is "self-talk," which shuts down the Reticular Activating System and keeps you from remembering.

People with ADD and ADHD are <u>not</u> dumb, even though their grades might make them feel that way sometimes. Most are very creative, and their mind is filled with thoughts that at times shut down the Reticular Activating System and make it hard for them to retain information. However, put people with ADD or ADHD in the workplace and in most cases they function extremely well. As a matter of fact, people with ADHD can make great entrepreneurs because they have high energy and tend to be risk takers. It also suits them because they enjoy change, so business or sales jobs are great for them because they love the creativity. But this type of creativity is not measured well in school. Students, for the most part, are measured by the ability to retain and recall information. People who have high grade points are like computers, with the ability to store mass amounts of information in a neat and orderly manner and then recall it when needed. As I said before, this is simply a gift that is handed down from generation to generation and not necessarily from better study habits or higher levels of supposed intelligence.

Now that you are aware of the Reticular Activating System, you can control it. If you are sitting in a room listening to a teacher, speaker or even friend and feel yourself daydreaming or self-talking, take a deep breath and become present with the person's words. Staying present is the most important part of keeping the Reticular Activating System open and absorbing what is being said. I believe that awareness brings change and this awareness can have dramatic impacts on being a great student, leader, employee, parent, friend or spouse.