

Introduction

Much has happened since this book was first published. Brain research has made leaps in terms of being able to tell us about the thinking processes of the brain and has given us hope for an immediate cure to many of the illnesses and problems associated with the brain such as autism and paralysis. Neuroscience and particularly neuroplasticity has done away with the idea that we only learn to a given point in our lives and then we prune off the growth in our later years. The truth, according to Norman Doidge (2008) in his groundbreaking book *The Brain That Changes Itself*, is that we are constantly learning, building dendrites, creating new brain maps, and pruning all through life and that the brain we were born with is not the brain that we die with.

Add to that the rapid changes in our society in the last five years. Our classrooms are a reflection of the changes taking place in society. For example, the culture of the classroom today is made up of many cultures with very different ideas about learning and about the purpose of the classroom and the teacher. Where we once thought that we could apply traits of poverty across the board to all children of poverty, we now know that the influences of poverty are not the same among cultures and that in research, culture trumps poverty every time in looking at influences on learning. In this book, I have included how culture affects motivation and how we can differentiate in the classroom based on the various cultures of our students. What a wonderful time to be a teacher! Never before have we had available to us the answers to unlock the mysteries of the mind or to change the world in the way that we have at this time. Through brain research and its implications for learning and remembering, we truly have the tools to work smarter. Never before have we had the opportunity to make positive change in today's troubled classrooms.

You have chosen one of the most awesome professions on earth; you have chosen to be a teacher. John Steinbeck wrote a wonderful poem, "Like Captured Butterflies," about a teacher who touched his soul. She was the kind of teacher who created a love of learning within her students. As teachers, we can choose to join those who punch in and out each day to receive a paycheck and who teach

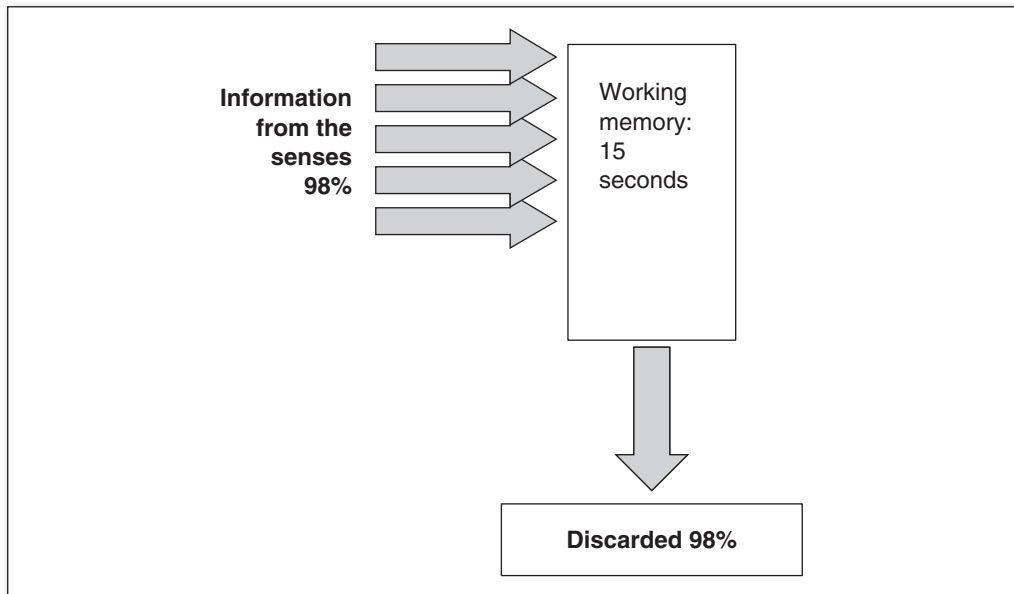
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What Is Motivation and Why Does It Matter So Much?

Rather than rewarding students for doing their job, we should help them celebrate a job well done. It's a subtle shift but an important one. Celebrating their success leaves the onus where it should be, with the student.

—Robyn Jackson

I speak all over the world to teachers and other educators. There seems to be one constant with teachers and that is the lack of motivation to learn displayed by many of their students. I sometimes begin my training by asking teachers to share the one thing that is keeping them from being the teachers they want to be and their answer is almost unanimous—the lack of motivation displayed by students today. In his ground breaking book *The Brain That Changes Itself*, Doidge (2008) says that our brains are constantly changing throughout our lives: the brains we were born with are not the same brains that we will have when we leave this world. He says that the old adage that “we can’t teach an old dog new tricks” is absolutely false; we are still learning at any age. Learning is more difficult as we get older only because we are more resistant to changing our mindsets; not because the brain cannot change. In other words, we can teach an old dog new tricks but the old dog has to be willing. The same is true of the newer puppies—our students. They can learn new material but three things must be present: (1) the desire to learn new information or new processes, (2) the

Figure 3.1 Incoming Information

Satisfying the Self-System's Need for Positive Emotion

Emotion is the strongest force for embedding information into the brain's long-term memory; it has the power to shut down our thinking or to strengthen an experience so that we remember it for life. We add emotion to the learning through sound (try adding music to lessons), celebrations of the learning, visuals, simulations, and real-world applications. My brother, who majored in pharmacy and works for a major drug company, told me recently that everything he ever needed to know to be successful he learned in second grade. His second-grade teacher, Mrs. Eggars, understood how to use emotion in the classroom brilliantly. He told me that when all of the other second-grade classes were studying a country, such as Italy, they brought in some of the food of that country one day, showed some of the costumes another day, and so forth. Not so in his classroom; his classroom *was* Italy. It looked like, smelled like, tasted like, and sounded like Italy. Mrs. Eggars even introduced them to Italian opera. According to Jensen (2006), the research on both animals and humans shows the following factors are important as we look at enrichment of the brain:

1. *Physical activity.* Sit and get has little or no effect on student learning; they must actively participate. The effect on learning also increases

HOW CLIMATE AFFECTS MOTIVATION

Climate refers to both the physical and emotional aspects of a classroom. Students need to feel comfortable in the classroom—both physically and emotionally.

Physical Climate

Stand at the door of your classroom. What do you see? Hear? Smell? What about your room appeals to students as they enter? How have you used such emotions as curiosity, acceptance, anticipation, security, and a sense of fun to make the room a pleasant place in which to be? To create an appealing atmosphere, try using music in your classroom when appropriate. Music has a tremendous impact on our emotions and it helps us remember. If you are teaching history or languages, bring in music from the time period or the place you are studying. Bring in room fresheners or gel candles (that do not have to be lit) to give the room a clean, fresh smell. If you are allowed, change the color of the room, change the lighting so that it is more natural, and change the room arrangement for the activities that you will be using. For example, for discussion, put the desks in a circle or horseshoe; for small group discussions, use small circles; and for debates, place the desks facing each other.

Emotional Climate

A positive emotional climate includes the following aspects. Studies from Brown University (2002), part one, say that, “Teachers who integrate disciplines and draw upon not only intellectual but emotional resources help students recognize the connections among subject material, real-world issues, and the deeper meanings of their students’ personal lives” (p. 43).

Acceptance by the Teacher

Students need to believe that what they have done in the past does not matter, that they have a chance to be successful. Hope is what motivates us to continue a project, our work, a relationship. Students need to have the hope that they can be successful in the eyes of the teacher. One of the ways that a teacher helps students to feel accepted is to give them frequent and specific feedback on their work—not the general “nice job,” but *specific* feedback. Another way that the teacher shows acceptance is by treating students with respect and with consistency. In a study by Nieto (1996) students said that caring was the most important attribute they looked for in their teachers. Some of the ways that these students determined whether a teacher was caring:

- *Change the Way You Are Presenting the Information.* If you have been doing most of the talking, have students talk or bring in PowerPoint slides, computers, or other media to break up the lesson.
- *Change Who Is Doing the Teaching.* Let students take segments of the lesson or bring in a guest speaker. If neither of these options is possible, change your speaking tone or the tone of the lesson.
- *Change the Working Environment.* Change the amount of time students have to complete the work, or change the rules, the goals, the resources, or the method of obtaining information.
- *In conclusion.* Some general guidelines for teaching to the metacognitive system:
 - ❑ Directly teach the rules, tactics, heuristics, and algorithms necessary to be successful
 - ❑ Provide examples
 - ❑ Provide guided practice
 - ❑ Provide independent practice
 - ❑ Provide distributed practice
 - ❑ Teach students to monitor and adjust their own work
 - ❑ Teach students positive self-talk
 - ❑ Provide feedback that is specific, diagnostic, and prescriptive

Figure 4.1 Visual Example of the Metacognitive System

