This book is not about the problems facing today's educators. It is about the vision and possibility that can be brought forth to make education work. The problems we face as educators are, to a large degree, merely symptoms. It's time to stand back, take a deep breath, and rethink what it means to be a teacher.

Eric Jensen

How Teaching Changes Lives

Chapter Preview

- A Teacher's Influence on Emotions and Memories
  - The Residual Effect of Memories
  - The Importance of Change on the Brain

A TEACHER'S INFLUENCE ON EMOTIONS AND MEMORIES

We've all heard of stories about a teacher who changed a student's life. These stories remind us of the power of successful teaching. In middle school, most of my own teachers were not exceptional—either good or bad. There was one who did not see eye to eye with me (or vice versa). And then there were Mr. Robinson and Miss Krisch. Both were English teachers, and both seemed to be supportive of me. They made friendly, constructive notes on my homework, and they shared personal stories in class. I couldn't say that their teaching style was dramatic. But I could say that they were caring, adult role models to me when I really needed them. When I finished schooling I became a middle school English teacher. I also found out that, years later, Mr. Robinson and Miss Krisch found each other and were married. Role models are a powerful force.

Students rarely say that what made a significant difference in their lives was the content they learned. It's true that the content may help students better prepare for the next grade level. It's true that the depth of background knowledge, the skills, or the schemas learned may propel them academically to their next grade. And it's also true that the better you teach them, the less likely they are to drop out or fail to graduate. But there's much more to the process of changing lives.

What is it for most students? What turns a student's life around? What turns you from a carrier of content to a superior teacher who transforms lives? In my case, it

was the relationship and the caring that helped me enjoy English and learn from role models. The broader answer is that it's not easy to quantify, but there are clues.

If a colleague befriends you, you're likely to remember him or her. The emotional memory sticks around. If, during childhood, a student felt embarrassed or humiliated by a teacher in front of the class, the incident might have left an emotional scar. This may lead to one of two school-age decisions: "I'll make sure this never happens in a class I teach" or "I now think less of teachers and would never become one." Once the emotional memories—good or bad—occur, they tend to influence related decisions in the future. In your teaching, what students will remember most are the emotions. Emotions influence our beliefs, decisions, and, ultimately, our actions. In short, changes in the brain can lead to changes in behavior.

The Residual Effect of Memories

I have asked a room full of teachers if they ever had a negative experience in school. I describe various scary, sad, horrifying, or mean experiences students have, the memory of which stays with them for years. These include feelings of being embarrassed or humiliated in front of their peers and countless other tactless acts. How many hands would go up among teachers (a group self-selected because they have "made it" through the system) if asked whether they have had those experiences one or more times? The answer is, consistently, the majority of hands. School experiences change us! School changes kids' brains, either for better or for worse.

The key experience that changes a student for the worse is the emotional wake left by a teacher. The wake has a residual effect. The power of emotional memories starts at the instant something happens and spirals into the future, influencing the decision-making process.

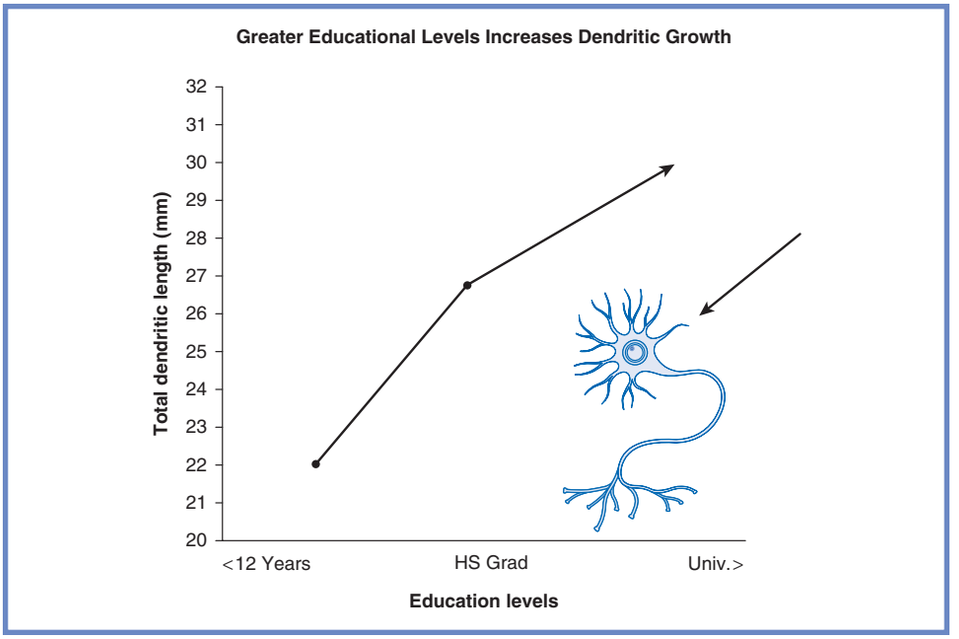
The Importance of Change on the Brain

Everyday experiences change the brain—reading a book, learning to play the piano, hearing an inspirational lecture, and countless other experiences. The amazing thing is that while it's happening, we are usually either enjoying the moment or disliking it, but certainly not aware of our brain being changed. The brain changes in order to survive on this planet. If we don't change, our environment would have to stay exactly the same for us to stick around. The more dynamic the environmental changes, more dynamic we must be—or we don't survive.

Some events change behaviors, others change personality, but always the brain is changed. You cannot get any change, of any type, that does not include a biological basis. The brain is involved in everything we do, from sleeping to surfing and from teething to teaching. Examples of types of changes in the brain include the following:

- size of brain cells
- quantity of connections between brain cells
- type of brain chemicals present
- amount of neural firing (cellular activation)
- quantity and survivability of new brain cells
- distribution of brain activity
- amount of brain mass in any particular area

In other words, when we change our minds or we change our behaviors, our brains become physically different. The relevance of this is profound: as a teacher, you change the brains of your students on a structural or anatomical basis every day. Below, you can see that for every year in the classroom, the actual structure of the extensions on the neurons grow in length.



Now for the bottom line: what do you do that causes the change? Here are some examples:

- relevant classroom activities
- meaningful, supportive relationships
- consistent skill building
- strengthening character values
- exercise and physical activity
- critical access to valued resources
- complex, coherent, novel learning
- stress-management tools

SUMMARY

We change when our brains are stimulated to learn new things, complex things, challenging things. We change our brains when we learn new skills, such as reading, math, or interpersonal skills. We change when we move from being a novice to being an expert at anything. Change also occurs when we develop new emotional memories. These memories drive new behaviors.

Reflection

- *What are your feelings about the topics presented in this chapter?*
- *What are some practical applications for what you're learning?*
- *What do you want to remember from this chapter?*