



The Role of Emotions in Learning

An expert explains how emotions affect your child's learning, memory, and performance in school.

By Priscilla L. Vail, M.A.T.

Priscilla Vail, M.A.T. has written a lot about the connection between children's emotions and learning. In this article, she describes the role emotions play in learning — both negative and positive.

I've been a teacher for over a quarter of a century, I've raised four kids and have six grandchildren. You'd think I'd know the alphabet by now. But hear this tale.

One evening I was sitting alone in my house in the woods. My husband was out of town at a meeting, our children were at their respective abodes, and I was reading a book. It wasn't even a murder mystery, just a story. I realized I had been hearing a knocking, thumping sound. I stopped, listened and it came again. Quite loud.

Although we live in a fairly safe area, there had been a series of recent break-ins. The noise came again. I hoped it was the steam heat and went back to my book. As I pretended to be reading, I remembered that we don't have steam heat in this house. More noises. I returned to my page, this time running my finger along the lines of print to keep my place. The noises intensified. I finally admitted to myself that the noises were coming from the basement and I had better get help.

Once I admitted to myself that I thought there were people in the basement coming my way, I went into full gear fear. I put down the book, hands trembling, mouth dry, and tiptoed to the telephone area. I got out the directory, listening to the increasingly loud sounds, and tried to find the listing for Benton Town Police. But I was so scared, I couldn't find the number. The noises got louder. Nearer too? I couldn't remember the alphabet. I couldn't make the telephone book work! So I called 911.

The squad car came quickly, strobe lights flashing, the guys jumped out, came to my door, hands on their guns, asking if I was OK. Putting my finger to my lips, I nodded that I was fine and gestured that the culprits were right down there. My saviors went to do their fearful duty and then I heard them laughing. "Wanna meet your criminals, Mrs. Vail?"

They had found a family of white tail deer, chewing off branches of my rhododendron and banging against my metal basement door. After the police left and I had stopped hyperventilating, I realized that fear had put a barrier between me and my own knowledge and information. I hadn't even been able to use the alphabet!

How Emotions Affect the Brain

As an adult, I can frame my problem in a funny story. But children in school don't have that luxury. Like me, their own knowledge often flies out of their grasp when they are scared. **Faced with frustration, despair, worry, sadness, or shame, kids lose access to their own memory, reasoning, and the capacity to make connections.**

The mere prospect of being asked to read aloud in class is enough to freeze some kids. Having to take a written test or exam, with its combined requirements for memory, reasoning, handwriting, planning and organization, can lock some kids' gears. The sight of a math word problem knocks some kids sideways. Scared kids perform poorly, and don't learn new information well. Anxiety is the enemy of memory. And, **sadly, in many of today's classrooms, we see children whose intellectual energies and capacities are drained by negative emotional states.** Emotion is the on / off switch for learning.

Sensitive people have been observing this for years, but now objective information from neurology substantiates our hunches.

The emotional brain, the limbic system, has the power to open or close access to learning, memory, and the ability to make novel connections.

A three-way view of the human brain would show it from side to side, back to front, and bottom to top.

On one side, the left hemisphere provides logic, sequence, time, and language. On the other side, the right hemisphere houses spatial organization, certain kinds of intuition, and math.

Looking from back to front, we could see the back as a repository of knowledge and experience, but we select, use, and orchestrate that information in our frontal lobes.

The third view moves from bottom to top like an elevator. At the bottom is the brain stem (the top of the spinal column and the base of the brain) which contains the mechanism for arousal. The next level is the limbic system whose job is to interpret the emotional value of incoming stimuli, deciding whether they are neutral, good, or deadly. The limbic system broadcasts its interpretation out over the whole body, and depending on its interpretation, either opens or closes access to higher cortical function, the top stop.

If the limbic system says "Trouble" (as it did when I heard the noises), access shuts down. The elevator doesn't reach the higher level, as when I couldn't use the alphabet. Conversely, if the limbic system says "Great!", the elevator smoothly ascends to a penthouse of knowledge, imagination, and creativity. Emotion controls the elevator.

Reinforcing Positive Emotional Habits

Parents are the primary source of their children's emotional habits. These predict, prevent, or prepare for academic satisfaction just as they forge satisfactory or disappointing connections with the outside

world. Children whose experiences have fostered optimism carry that habit with them into the school room.

Here are six principles of good practice to help parents reinforce positive emotions.

1. **Prompt motivation.**

Motivation comes from confidence which, in turn, is the harvest of competence. Break down new challenges into manageable components. From riding a bike to learning a foreign language, monitor progress, support effort, praise new competencies, and give the child a chance to showcase them.

2. **Spark curiosity.**

Curiosity thrives on opportunities to take chances on ideas and to enjoy the messiness of questions, as well as the tidiness of answers. It dies when imagination, humor, and risk are suspect.

3. **Nourish intellect, talent, and power.**

Find what your child does well and budget time, money, and psychological energies for the good stuff. Unsupported weaknesses ache, but unexercised talents itch.

4. **Encourage connections.**

Too much schooling happens in compartments and is stored in shoeboxes. Parents can counteract this by helping kids connect experiences with words, words with pictures, pictures with music, and by weaving ideas and happenings into a web of life.

5. **Monitor growth.**

Assemble a portfolio for each child. Ask the child to keep a journal (words **or** pictures). Record everyone's height on the side of a door frame every Thanksgiving. On Sunday evenings, before they go to bed, ask your children to say one thing they did this week for the first time. It doesn't need to be exotic or expensive: I walked two miles, I baked a cake, I wrote a poem about the Boston Red Sox. Do the same thing yourself. Be a model.

6. **Accept special considerations.**

Parents must provide support for weaknesses, laughter for the good of the soul, organizational help, and opportunities for development of talent and reinforcement of character.

Positive emotional habits, flowing from these principles of good practice will help kids meet challenge with optimism and vigor and respond to other people with openness and joy.