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HOW TO TEACH SO STUDENTS REMEMBER

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Preface

I am sitting across from two of my students. Bobby is probably the best young chess player I have ever known. He also is a very good student. He wants to be a doctor just like his dad and his mom. Cory, in contrast, doesn't care much about school and spends most of his time on his skateboard. He is the best skateboarder I have ever seen. I don't think Cory knows where his dad is or what he does; his mother has a day care in her home. I am concerned that he is not learning very much. I am with them to see whether I can discover how they learn.

"Cory, how did you get to be so good at skateboarding?" I ask.

"Practice," he replies.

"OK, how did you get interested in it?"

"I dunno," he responds.

"I think I just seen this guy on a board doin' all these tricks, and I thought it was cool. I asked my brother to get me a board, and he did."

"So, you saw this guy. You bought a board. And you practiced?"

"Yeah. I thought I could be good." "Thanks, Cory. How about you, Bobby? How did you get involved with chess?" I ask him.

"I saw the movie Searching for Bobby Fischer. I thought it was cool the way they made their moves so fast. My dad has a chessboard in his office at home. I started reading about chess and practicing," Bobby says.

"Are you hoping to be another Bobby Fisher?" I want to know.

"Maybe," he replies shyly.

"OK, boys, I want to know the process. You saw somebody do it. You practiced until you were good. Is that it?" Cory nods.

"If you want to be good, you have to think about it and picture it in your mind. And you gotta practice. A lot."

“How do you know when you’ve got it right?” I ask.

“When you don’t bang your knees and elbows or break your wrist!” Cory laughs.

“With chess, you find out when you win or lose,” Bobby offers.

“OK. Let’s look at the steps again. You find out about it. You think about it. You try it. You get feedback by either losing a game or getting hurt. You practice until you get it right. Is that it?”

“Then you compete,” Bobby says. Cory nods.

“How do you prepare for a competition?” I ask both boys.

“I review all my moves. In my head and on the board,” Bobby responds.

“Yup. I do the same,” Cory adds.

“I go over and over my jumps. And I try to make up my own moves. Ya gotta get creative to win at boarding.”

“It’s kind of like that with chess, too,” Bobby begins.

“My dad will make some unconventional moves, and I have to counter those moves. It’s harder to win against an amateur sometimes because they don’t follow the usual playing patterns.”

“So, you practice until you’re perfect, and then you practice the unexpected?” I ask.

“Yup. That’s it. Anything else?” Cory seems anxious to leave.

“One more thing. When you compete, even though you’re prepared, are there any specific factors that affect your performance?” Bobby speaks first.

“Sometimes I get really nervous, and I can’t see the moves in my head. I have to try to relax. It helps if I have been able to practice at the place where I compete. Usually I get that opportunity.”

“Yeah,” Cory breaks in.

“I was trying to do a hard flip at this skate park in Chicago, and I didn’t know the place at all. It took me three times to get it right. When I fell the second time, I looked at my brother and remembered how he told me to do it.”

“Thanks, boys. You’ve helped me a great deal. I’ll see you both in class.” I smile as they leave.

These boys shared with me the secret, the system. Two very different individuals who follow the same learning pattern - one using it for a physical skill, the other for a mental one. They followed the identical steps. And their system made perfect sense with the way the brain learns and remembers.

This book is not an attempt to teach the biology of the brain. Many excellent books are available that do that. This book describes a seven-step process for us to store pertinent information in long-term memory and then to be able to access those memories in many different situations. Creating accessible memories takes time.

Some of you will be very familiar with the brain terminology, but for those of you who are not, Appendix A provides a “brain briefing.” Most of you will be more interested in the steps themselves. I urge you to examine the memory processes as they are explained. Being able to articulate the reasons why something works is helpful in spreading the word: Brain-compatible teaching works.

I believe very much in Stephen Covey’s (1989) habit of beginning with the end in mind. In The Seven Habits of Highly Effective People, he says, “To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you’re going so that you better understand where you are now so that the steps you take are always in the right direction” (p. 98). Teaching for memory will be successful if you are clear about what your students need to remember. To make the journey exciting, productive, and memorable is what this book is about.

I make several assumptions as I write this book:

• The teacher who is teaching for memory and transfer determines first what needs to be measured. • This teacher then creates the assessment.
• This teacher gives students a clear target.
• This teacher is attempting to plan learning experiences and instruction that will clearly lead students to the target.
• This teacher is revealing important information to the students that they will be able to use in the real world.
• This teacher has created a brain-compatible classroom.
• Even though memorization may play some role in what is taught, this teacher is teaching for conceptual understanding.

Contents

Contents

2. Reflect: Reflection is not a luxury; it is a necessity.

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Contents

3. Recode: Self-generated material is better recalled.

Contents

4. Reinforce: Feedback is vital to learning.

What Is Reinforcing?

Types of Feedback

- Motivational Feedback
- Positive Feedback
- Negative Feedback
- Informational Feedback
- Developmental Feedback
- Feedback Results

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Contents

5. Rehearse: To get information into long-term memory, it must be rehearsed.

Contents

Contents

7. Retrieve: Memory retrieval may be dependent on cues.

Contents

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THANK YOU FOR READING!

About the Author

Marilee Sprenger is a professional development consultant who has taught at all levels, from pre-kindergarten to graduate school. She is an adjunct professor at Aurora University where she teaches brain-compatible strategies and memory courses. For the past 15 years she has been engaged in raising student achievement using brain-based teaching strategies, differentiation, and memory research. She is a member of the American Academy of Neurology, the Cognitive Neuroscience Society, and the Learning and Brain Society, as well as many education organizations such as ASCD and Phi Delta Kappa.