Chapter 1

Background
How this system works

Knowledge once gained casts a light beyond its own immediate boundaries.
—Tyndall

When your great-grandparents were first exposed to the gasoline-burning car, they had to have some assurance that the contraption wasn't going to blow them apart the first time they stepped on the pedal. They may not have understood the complexities of the internal combustion engine, but what they did know helped them to trust the automobile and eventually buy it in great numbers.

The purpose in knowing how this system works is so that you will trust it and eventually use it. For best results, try to assimilate this background information as fully as possible. It will help you later to understand the *why* behind the techniques you will be using.

WHAT IS LEARNING?

Learning is something that occurs very naturally in life. As little children, we learn to walk and talk effortlessly. Yet, when we leave toddlerhood and enter school, things often change. Why is that?

The answer, in part, has something to do with the way in which learning takes place. As toddlers, we determine, much of the time, our learning environment. It is unstructured yet full of play and exploration. We move freely from object to object, experiencing whatever we find stimulating in that moment, and we learn. (See *Photo A,* courtesy of Grace Christian School, Medford, OR.)

In school, however, the environment is determined for us. It is structured and often very much removed from the environment we flourished in as toddlers. (See *Photo B,* courtesy Mr. & Mrs. Don Young.)

This is the beginning of your journey. This journey is about empowerment and honoring the best of who you are. This chapter will help you to more fully understand the theory behind this learning system so that you will be able to trust and use it later on.

Photo A

Photo B

HOW I LEARN IS DIFFERENT FROM HOW YOU LEARN

Figure 1

It is important to understand that we all learn very differently. According to Dr. Dan Weinberger, Neurologist and Psychiatrist at the National Institute of Mental Health, "Brains normally differ more from one another than do finger prints." (See *Figure 1*)

All human beings possess their own individualized, multimillion dollar computer sitting atop their shoulders. Unfortunately, most of us do not know how to use this computer. However, as toddlers, we were successful at learning because we did use our computers correctly. This happened quite by accident through our unstructured play. We did what we enjoyed. When we entered school, we abandoned what had worked for us and instead, did what was expected.

It was enlightening to find out exactly how I learn best, so that I can focus on just those techniques.

Wisconsin
Nursing Student

THERE IS LEARNING AND THEN THERE IS *LEARNING*

Much of the learning that takes place in high school and college is unproductive. It may produce an *A*, but it is not *real* learning. It utilizes short-term memory and is retained just long enough to pass the test.

A STUDY

This system enables me to feel OK about using any system. In other words, it was nice to be assured that I can learn my own way and not someone else's way.

Washington
Sociology Student

Researchers at Johns Hopkins University, Massachusetts Institute of Technology (M.I.T.), and other well-regarded universities have documented that students who receive honor grades in college-level physics courses are frequently unable to solve basic problems and questions encountered in a form slightly different from that on which they have been formally instructed and tested. (Taken from the book, *The Unschooled Mind,* by Dr. Howard Gardner.)

Perhaps your instructors are asking you to read this book, not because you haven't done well in school, but rather because the kind of learning that you have done in the past will not serve you in your present situation. This is true of nursing students and law students, as well as graduate students. The learning required in these arenas is very different from the learning required elsewhere.

It utilizes long-term memory. What is being learned is associated with previously learned information. It has meaning and significance and stays with the individual long after the information is needed. Long-term memory is the basic tool for critical thinking.

WE HAVE ALL EXPERIENCED THIS KIND OF LEARNING

Long-term learning occurs within everybody from time to time. It happens because we accidentally use our brain the way it is designed to be used. The football player who flunked biology and learned 101 complex football plays in the same semester and the high school dropout who learns the words to songs after hearing them only one time are good examples of using your brain the way it is designed. If a mind is *Musical*, it needs rhythm to learn efficiently, not words.

You may remember a time when you learned a person's address after hearing it only once. Or maybe you remember a time when you learned someone's name easily instead of struggling with it. In both of these examples, you didn't suddenly get smarter, you just used your brain correctly.

This system helped me with my grades. It cut my study time and I really know the material instead of it just being memorized.

Washington
Business Major

INTELLIGENCE IS MORE THAN YOU THINK

I didn't fully understand the significance of this phenomenon until several years ago when reading the book, *Frames of Mind,* by Dr. Howard Gardner, a researcher at Harvard University. Through his analysis of learning styles, Dr. Gardner has blown a hole in the traditional definition of intelligence. He maintains that all normal human beings possess seven areas of intelligence. Traditional IQ tests have focused only on two of these areas and he believes that the other five areas deserve more attention.

I agree with Dr. Gardner. As a matter of fact, I have discovered that most human beings have abilities or talents in several of these seven areas and that long-term learning takes place when these areas of talent are stimulated.

Before I explain, I want you to understand that this explanation is done from an experiential point of view and is not yet verified scientifically. It is an explanation which has been found to be helpful by those learning this system and should be used only for that purpose.

Within our brain, we have areas of short-term memory and long-term memory. Seven neurological pathways lead into these areas like freeways going to a ballpark. Some of these pathways look like the ones in *Figure 2*. They go from hither to yon and back again.

Have you ever tried to learn something and found it necessary to review the material again and again before you were able to remember it? Well, you were probably using a pathway that looks like our example in *Figure 2*.

Still other pathways look like the ones in *Figure 3*. The pathways have actual breaks in them.

THE BRAIN

Legend
ST — short-term memory
LT — long-term memory

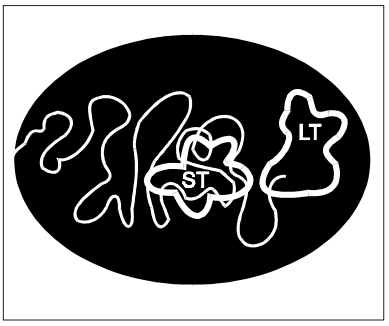

Figure 2

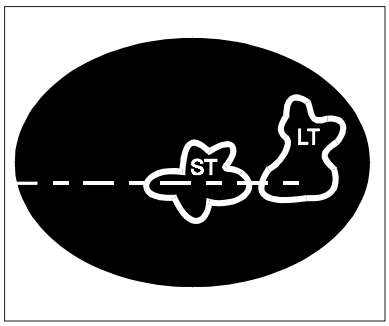

Figure 3

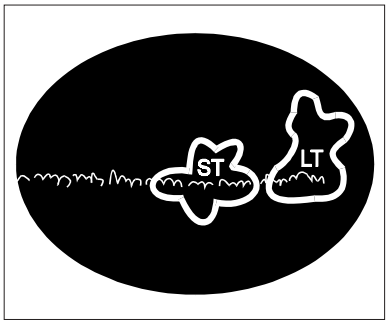

Figure 4

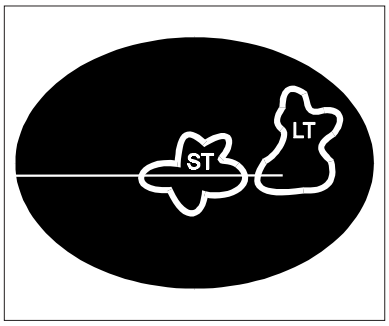

Figure 5

I went from a C in microbiology to an A on my last test and I still remember everything.

Pennsylvania
Nursing Student

You may remember a time when you thought you had learned something and then the next day when you tried to recall what you had learned, you couldn't remember a thing. Probably you used a pathway like the one in *Figure 3*.

Other pathways look like the one in *Figure 4*. They are poorly insulated, so they short out, similar to how the wiring in a house might short out if it isn't insulated properly.

Have you ever experienced a time when, before a test, you knew everything, during the test you couldn't remember a thing, and after the test, when you relaxed, all the information came flooding back to you? Your circuits probably shorted out when stress was present and began functioning again when the stress was alleviated.

Fortunately, all normal human beings have two or three neurological pathways that look like the ones in *Figure 5*. They are strong and well developed and can carry information effectively.

THE KEY IS HOW YOU PROCESS IT

When a stimulus, such as a person's name, jumps onto one of these beautiful thoroughfares, you will remember that person's name for a long time, and learning will be almost instantaneous. This happens because the stimulus goes directly to long-term memory. However, if a similar stimulus jumps onto one of the neurological channels which is not very well developed, as previously illustrated, you will forget the name almost instantly or hold it only for a few minutes or seconds, and then forget it because the stimulus only gets to short-term memory.

Your intelligence, or rather your ability to learn, has not changed in either situation. The only thing that has been altered is the way in which you processed the incoming stimulus. One way worked and the other way didn't. The reason I suddenly had success in graduate school wasn't because I instantly became smarter. It occurred because I accidentally began learning through a neurological pathway which was well developed. I am, according to Dr. Gardner's model, talented in *Knowing Others*. People who are talented in *Knowing Others* learn better through doing than by reading a book. Those who fall into this category are *Experiential Learners*. When I began studying speech pathology, I would learn about a certain speech disability in class and then go into the clinic and work with clients who had these same problems. Working one-on-one with these clients allowed me to experience the specifics of what had been discussed in class and thus, long-term learning occurred.

THE IDEA WAS BORN

When I first read Dr. Gardner's work, the thought occurred to me that anyone, not just me, who discovered his or her attributes and stimulated those corresponding neurological pathways during learning, would also learn more effectively.

I began trying this idea with college students. I will never forget the day I knew I was on to something. I was walking across campus and someone came up to me from behind, grabbed me, and shouted, "It works." I thought I was being attacked. Instead, an excited student was reporting to me that a miracle had occurred in her life.

Only the day before, this student had discovered that she was talented *Musically* and *Body Kinesthetically*—two of Dr. Gardner's channels. She informed me that she played the piano by ear. She also mentioned that she had an anatomy test coming up, for which she had to learn a great number of anatomical terms. I suggested that she put this information on a tape—for reasons I will discuss later—then listen to the tape while she played the piano. Playing the piano is not only a *Musical* ability, but also a *Body Kinesthetic* (body movement) ability. She listened to the tape of terms one time through while she played the piano. She then had her parents test her on the material to see how much she had learned. To her surprise, she had learned everything on the first try.

It is a good feeling to walk into a testing situation when you are confident and feel you've got a handle on all the materials being tested. That is what this system did for me.
Pennsylvania
Nursing Student

*YASTYT has helped me tremendously. In fact, I **didn't** use the techniques I learned from this book on a recent test and my grades showed it. It made me realize just how effective it is.*
Pennsylvania
Nursing Student

TAPPING INTO YOUR INNATE ABILITIES

Sound unbelievable? The results happened not for any mysterious reason but simply because the student was tapping into her innate intelligence. She was stimulating her strong neurological pathways and the information was going straight to long-term memory. This is the best-case scenario. Most people will have to review the material being learned a couple of times but generally not more.

It has been believed for years that we use between 2 percent and 10 percent of our natural intelligence. I believe that when we learn how to use our brains the way they are meant to be used, a far greater percentage of our intelligence is made available to us and therefore learning improves.

When you move on to the *Self-Evaluation* chapter of this book, keep in mind what has been discussed above. Remember, all people of normal intelligence who have not experienced brain damage have areas of talent. You may not be manifesting these abilities, but the neurological pathways still exist and can be used quite effectively to facilitate your learning.

I sleep better before exams. This system is so much better than just memorizing.
Pennsylvania
Nursing Student

ARE YOU AN AUDITORY, VISUAL, OR COMBINATION LANGUAGE PROCESSOR?

What skill do you think people use most when they are in school: visual memory, language processing or verbal expression? The answer is *language processing*. If you look at all the activities you do in a single day as a student, you will see that many of these activities center around language processing.

This program helped me know myself better.
Pennsylvania
Psychology Major

So what is language processing? If you observe an accident and can tell the police exactly what happened, this is *not* language processing. However, when you read a book or listen to someone else talking, you are processing language.

Let's list all the things we do as students:

- Listen to lectures—This is language processing.
- Read text books—This is language processing.
- Take tests—This is language processing.
- Study for tests—This is language processing.
- Write a paper—Some elements involve language processing.

I like studying and maintaining good grades. Using this system has helped me study more efficiently.
So. California
Nursing Student

MOST EVERYONE HAS A PREFERENCE

When I was developing this program, I wondered if normal learners have a preference for how they process language. Do some people remember more if they hear the information, while others remember more if they read it? What I discovered, after surveying thousands of students, surprised me. People usually do have a preference and having a preference is normal.

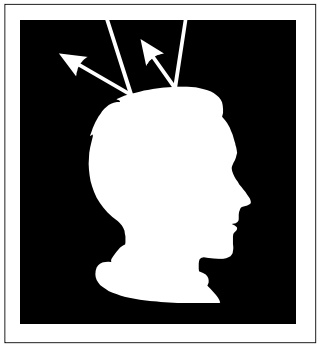

Figure 6

Some people have perfectly normal hearing, yet they have a great deal of difficulty remembering what they have heard. Many times these people are considered poor listeners, when in reality, they listen and hear well. What they hear just doesn't sink in. (*See figure 6.*)

Other people, with normal vision or vision which has been corrected, have a difficult time remembering what they have read. They may be great readers, but when their reading comprehension is checked, it is usually poor.

Some people have difficulties processing language with their eyes and their ears separately, but when language is processed through both their eyes and ears together, e.g., reading aloud, then comprehension is very good. We call these people *Combination Language Processors*.

KNOWING YOUR PREFERENCE IS IMPORTANT

Knowing how I learn best makes me feel more comfortable.

Knowing your preference is very important if you are interested in learning more effectively. It fits hand-in-hand with Dr. Gardner's learning style information which I discussed earlier. If the information you want to learn isn't getting into the system, it doesn't matter how your brain is functioning, because there is nothing there to process. Many of you will be surprised to learn just how little information is getting in when you read or listen.

We are now ready to move on to the *Self-Evaluation* chapter of this book. This chapter will help you to uncover your strengths in terms of Dr. Gardner's model, as well as your preference for processing language. It is important to remember that we are all beautifully different. The key is to discover your strengths and run with them. Everybody has areas of weakness. It is normal. In *Photograph C*, to the right, you see Tim Milton, skiing at Mt. Ashland, Oregon. Tim is a young man who is blind, and yet he skis. Winners focus on their strengths and don't worry about their shortcomings. Read on and have fun discovering what makes you tick. (Photo courtesy of Mr. and Mrs. Wes Milton.)

Photograph C