# The Way They Learn

CYNTHIA UI RICH TOBIAS



Tyndale House Publishers, Inc. Wheaton, Illinois

### THE WAY THEY LEARN

Copyright © 1994 by Cynthia Ulrich Tobias, M.Ed. All rights reserved. International copyright secured.

Tobias, Cynthia Ulrich, 1953-

The way they learn / Cynthia Ulrich Tobias.

p. cm.

Includes bibliographical references.

ISBN 1-56179-414-7

1. Learning. 2. cognitive styles in children. I. Title.

LB1060.T63 1993 370.15'23—dc20

94-14104 CIP

The terms: Concrete Sequential, Abstract Sequential, Abstract Random, and Concrete Random, are used with the permission of Anthony F. Gregorc, Ph.D.

A Focus on the Family book published by Tyndale House Publishers, Wheaton, IL 60189.

No part of this publication may be reproduced stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopy, recording, or otherwise—without prior permission of the copyright owner.

Editor: Gwen Weising Cover design: Jeff Stoddard

Printed in the United States of America 03 04 05 06 07 / 27 26 25 24 23

### **Table of Contents**

Acknowledgments	
Chapter One:	
What Is a Learning Style?	1
Chapter Two:	
What Style Are You?	11
Chapter Three:	
The Dominant Concrete Sequential Learning Style	27
Chapter Four:	
The Dominant Abstract Sequential Learning Style	39
Chapter Five:	
The Dominant Abstract Random Learning Style	49
Chapter Six:	
The Dominant Concrete Random Learning Style	59
Chapter Seven:	
How Do We Concentrate?	73
Chapter Eight:	
How Do We Remember?	87
Chapter Nine:	
How Do We Understand?	101
Chapter Ten:	
How Many Ways Can We Be Smart?	127
Chapter Eleven:	120
Putting It All Together	139
Chapter Twelve: The Difference Retugen Learning Style and Learning Disability.	1 40
The Difference Between Learning Style and Learning Disability	
Endnotes	
Bibliography	104



## How Do We Understand?



"Can you tell me where to find the library?"

"Sure! Just go down two blocks to the park with the statue in the middle, you know—where they tore the road up last year. Take a right until you get just past the fire station, then go about three more blocks until you see a great big white house with a green picket fence. The library is right across the street."

"I'm sorry, I'm a little confused. Can you tell me street names? Can you give me the address of the library?"

"Huh? Nope. Sorry—I only know how to get there!"

We have already looked at several ways to identify learning styles. The next layer of information can give you a solid grasp on the way you and your children deal with information from the very beginning. As we can see in the story above, when we learn, a fundamental difference occurs in the way each

of us takes in and communicates the data. The way in which we take in information affects how we communicate it to others. The Witkin model of learning styles can help us recognize and appreciate this process.

This chapter is dedicated to helping you understand that learners of all ages can benefit by recognizing and using inborn learning strengths for tackling almost any task, assignment, or test. As we focus on the parent/student and teacher/student relationship, you may find unexpected reasons your child is experiencing success or frustration when it comes to learning.

During World War II, the United States Navy made a startling discovery about their fighter pilots. All of these pilots were exceptionally intelligent, incredibly talented, extremely motivated, rigidly screened, and thoroughly trained. However, when flying through a fog bank, some of these pilots would fly out of the mist upside down. This *concerned* the Navy! They could not afford to have pilots in the air who lost their whole sense of being upright when they lost their external field of vision.

The Navy called in a psychological researcher, Herman Witkin, to conduct some tests on the pilots to determine which of them should be flying and which needed more instrument training before they got into any more cloud covers.

Witkin designed a special room for his experiments. He placed each pilot in a chair that tilted inside a room that also tilted. When the pilot was sure he was sitting straight up and down, he was to tell Witkin. Some of these pilots would claim they were sitting straight, and yet when Witkin checked, they and the room were actually tilted—sometimes as much as 30 degrees! They needed the room to be lined up with them in order to feel that they were sitting straight.

It's a lot like the sensation you get at Disneyland's "America the Beautiful" round theater. You're clutching the railing trying to keep from falling off the back of the fire truck you see on the screen. If the lights in the theater came on, you might feel a little silly! Nothing is actually moving. You are standing still and the only thing that's really changed is your external field of vision.

Other pilots tested by Witkin *always* knew when they were sitting straight up, no matter how tilted the room was. Evidently they were not

affected as much by their external field of vision as the first set of pilots. This experiment began strictly as a test of physical perception. Almost by accident, Witkin and his associates began to notice some behaviors and traits that were consistent between these two types of pilots when they lost their external field of vision, and the way in which they approached learning tasks.

The pilots who always knew when they were sitting straight regardless of their surroundings tended to be more *field independent*, or *analytic*, when learning new information. They automatically broke down any information given them into component parts and then focused on details. The other pilots, those who needed their external field of vision in order to know when they were sitting straight, tended to approach information in a much more *field dependent*, or *global*, way. That is, they got the overall picture or "gist" of things, but they didn't worry about the details as much. Remember, both types of pilots were intelligent, talented, and motivated. The difference lay not in whether they *could* learn, but how they naturally learned *best*.

Because each person sees the world from his or her own frame of reference (global or analytic), it is possible that even when many people see the same event, they'll have several versions of what actually happened.

As a police officer, I helped investigate many automobile accidents. I would pull up to the scene, locate witnesses, and then begin the challenge of finding out what actually happened. The first witness might give me an accurate description of the cars involved—the year, the make, the model, the color. The next witness wouldn't have a clue about the kind of cars they were, but would launch into a detailed description of each driver. The third witness would look a little embarrassed at not noticing the cars and drivers, but couldn't wait to relate how the accident *happened*.

Did these people see the same accident? Yes, but these varying perspectives reflect the same learning differences the pilots experienced. The people who witnessed the accident were looking at the situation through their own "windows." The analytics were automatically recording details in their minds; the globals were naturally more concerned with the overall picture of what had happened.

As students, the way we approach learning and the effectiveness of our

studying and taking tests is also greatly influenced by our natural tendency toward being more *global* or *analytic*. Naturally, no one person is purely one style or the other. But if we can identify some strengths and natural inclinations, we may discover more efficient ways to study and learn.

The following informal survey will help you determine your natural global or analytic strengths. Later you will probably want to give this test to your child or to answer for him if he is too young to take it himself. Answer as honestly as possible, and even though you may want to choose both options on any given statement, always try to choose the one you would do *most* of the time.

What's My Dominant Learning Style?

Place a check mark beside the *one* statement in each pair that best describes your preferences *when you are learning*.

When you are learning, do you *usually*:

	Α	В	
1.			like learning by yourself better than working with another person or group? like learning with another person or group better than working by yourself?
2.		_	finish one job before going on to the next one? begin a new job even if you have not finished an earlier one?
3.		_	begin your work without waiting to see how someone else does it? prefer to wait for someone else to start before you begin?
4.	—		find it easier to remember details when you read than to remember main ideas? find it easier to remember main ideas when you read than to remember details?
5.	_		prefer true-false and multiple choice tests with one right answer? prefer tests that ask you to explain reasons and write out answers?
6.			need to have your desk and work area neat to concentrate? find you can get your work done even if your desk or work area is cluttered?
7.		_	feel your time was wasted if the teacher doesn't put a grade on work you turned in? not mind the teacher not giving you a grade as long as your work was recognized?
8.	_	_	prefer competing on your own to competing on a team? prefer competing on a team to competing on your own?
9.			prefer to have choices as to how to accomplish assignments you're given? prefer that the teacher tells you exactly how the assignment should be done?
10.			want to go over a test that's been graded in order to correct what you missed? want to look over your graded test but do not want to correct specific answers?
11.			find it fairly easy to ignore distractions while you work or study? find it pretty difficult to ignore distractions while you work or study?
12.	_		prefer to have an assignment in smaller parts and given step-by-step? need to know the whole assignment before you work on parts or steps?
13.			prefer to think about a decision and figure out what to do by yourself? ask other people's opinions if you aren't sure about making a decision?
14.			not take it personally if someone tells you you've done something wrong? automatically take it personally if someone says you've done something wrong?
15.	_		blame the test if you don't do well and you studied what the teacher told you? blame yourself if you don't do well on a test and you studied what the teacher said?
			Column Totals

Total the number of "check marks" in each column. If the number is greater in column A, you tend to be more *analytic*. If the number is greater in column B, you tend to be more *global*.

Although you got a higher number in one column, remember that there is no *pure* style. All of us are a mixture of *many* style characteristics. The terms *global* and *analytic* are extremes, and most of us will find ourselves to some extent in both categories. Remember, too, that how you came out on the Gregorc model will influence the type of global or analytic learner you are. For example, there's a big difference between an analytic who is Abstract Random and an analytic who is Concrete Sequential!

My husband, John, is extremely analytic by nature. When we watch a movie together, he must watch *every single* credit go by. He reads each name and notes each line of information. If you ask John later what the movie was about, he provides a *lengthy* retelling of the story, complete with snippets of dialogue. I watched the same movie. But because I am a more global learner, if you were to ask *me* what the movie was about, I would probably give you a very general and vague description of the plot. Who starred in the movie? I don't know—some tall guy with brown hair who plays on a TV show. Where was the movie filmed? I don't know—big city, tall buildings, snow on the ground. After all, you didn't tell me there was going to be a *quiz* at the end! You see, I just *experience*d the movie. I don't pay attention to specific details unless you tell me ahead of time what I'm supposed to be looking for.

The global learner sees the *big picture* or overall view, while the analytic focuses on the *parts* that make up the big picture. A more analytic learner figures you have to clearly understand the parts to eventually understand the whole. The more global learner claims there's no point in clarifying a detail if you can't see where it fits into the whole picture. The global sees all the parts as being related to each other and may have trouble breaking down the big picture into separate pieces.

It's a lot like putting together a jigsaw puzzle. As a global, I must constantly see the completed picture on the puzzle box to put the individual pieces together. My analytic husband often prefers to analyze how the shapes of the puzzle pieces fit together. He may put several sections of the

puzzle together before he ever concerns himself with how everything fits into the completed picture.

Consider the following lists of characteristics for the analytic and the global learning styles. You'll probably identify with several items from *both* lists, but you may also discover a distinct pattern of preferences when it comes to how you approach and process what you need to know. Remember, this has to do *only* with how you interact with *information*, not necessarily how your global or analytic tendencies may show up in interpersonal relationships.

### **HOW ANALYTIC ARE YOU?**

### **Analytic Strengths**

- details
- focus
- organization
- remembering specifics
- direct answers
- consistency
- sense of justice
- objectivity
- individual competition
- doing one thing at a time

### What You Should Know About the Analytic Style

- likes things ordered in a step-by-step way
- pays close attention to details
- must be prepared
- needs to know what to expect
- often values facts over feelings
- prefers to finish one thing at a time
- rarely becomes personally or emotionally involved
- logical
- self-motivated
- finds the facts but sometimes misses the main idea

### **Analytic Frustrations**

- having opinion expressed as fact
- not understanding the purpose for doing something
- not understanding how a teacher grades
- listening to an overview without knowing the steps involved
- listening to an explanation when all that's needed is a "yes" or "no" answer
- dealing with generalities
- having to find personal meaning in all that they learn
- not finishing one task before going on to the next

### **HOW GLOBAL ARE YOU?**

### **Global Strengths**

- seeing the big picture
- seeing relationships
- cooperating in group efforts
- reading between the lines
- sense of fairness
- seeing many options
- paraphrasing
- doing several things at once
- giving and receiving praise
- reading body language
- getting others involved

### What You Should Know About the Global Style

- sensitive to other people's feelings
- flexible
- goes with the flow
- learns by discussion and working with others
- needs reassurance and reinforcement
- works hard to please others
- takes all criticism personally
- avoids individual competition

- tries to avoid conflict
- may skip steps and details

### Global Frustrations

- having to explain themselves analytically
- not getting a chance to explain themselves at all
- not knowing the meaning for doing something
- having to go step-by-step without knowing where they'll end up
- not being able to relate what they are learning to their own life
- not receiving enough credit for their effort
- having to show the steps they used to get an answer
- accepting criticism without taking it personally
- people who are insensitive to other people's feelings

Whether we are more global or analytic, we tend to assume that others want us to give them information in the same manner we ourselves would want to receive it.

In our home, John is by far more analytic than I, and I am frequently guilty of ignoring his need for specific information in favor of my more general outlook. A classic example is when he asked me where to find a particular item. "It's in the other room," I told him.

He just looked at me and blinked. "What other room?" he asked.

"The dining room."

"Where in the dining room?"

"The rolltop desk."

"In the rolltop desk or on it?"

"In it, I think."

"Toward the front or toward the back?"

"Toward the back."

"On the left or on the right?"

"On the left."

That incident happened a long time ago, and I've learned more about how an analytic mind expects to receive information. Now when John asks me where something is, I pause for a moment. Then I say something like, "It's in the kitchen in the cupboard to the left of the stove on the middle shelf toward the back on the right." He looks at me with a grateful smile and says, "*Thank you* for being so specific!"

Now I may not actually know where the item is, but I know it's close to the place I said. I have discovered that if I start out with very specific information, John doesn't mind continuing the search!

Since the Witkin model deals specifically with how we understand information, let's take a look at the differences between global and analytic learners when it comes to study skills.

### PAYING ATTENTION

Your naturally dominant learning style affects how you listen, what you pay attention to, and what you remember.

When more global learners first hear new information, they take it in by listening for the "gist" of what's being said. They can quickly get the main idea or topic and may even find themselves getting ahead of the speaker. Because it is not natural for them to listen for specific *details*, it may sometimes appear that they haven't been paying attention at all. But they have been getting general impressions and an overall idea of what is being said. Unless more global learners consciously train themselves to listen for details, they may miss significant parts of assignments or lectures.

One mother asked her very global young daughter, "What did you do in school today?"

The daughter replied enthusiastically, "Oh, Mom, it was fun! We studied fractions. And the teacher drew a pizza, then it was a Mercedes sign, and then we all *ate* the pizza!"

Mom asked pleasantly, "Do you have any homework?"

Her daughter looked surprised. "Homework? I don't think so. I didn't hear the teacher say anything about homework."

This global child was so busy *experiencing* the class that little or no thought was given to a specific or bothersome detail like homework.

Let's look at the more analytic learner. When analytics first hear new information, they are usually listening for specific details. Later they may

even be able to remember the exact words the speaker said. Since analytics naturally tune in to details, it's sometimes difficult for them to identify the overall *concept* the details are describing. For example, an analytic learner may be able to relate all the facts of a story just read but may not be able to explain the *theme*. The analytic must consciously stretch himself to see and understand the bigger picture.

### FOLLOWING DIRECTIONS

The differences between the dominantly global and the dominantly analytic style are especially noticeable when it comes to listening and following directions. For example, when a parent or teacher gives directions, the analytic learner listens carefully, then wants to begin without further interruptions. The global learner may also listen to the directions, but he may frequently ask that the directions be repeated. The global was listening for *what* is supposed to be done, not necessarily *how to do it*. In addition, he is often distracted by wondering what *wasn't* said.

In a recent teaching strategies class, I divided the teachers into two groups—globals and analytics. Both groups were to design a lesson plan that would effectively teach extremely global students about Einstein's Special Theory of Relativity. Since some of the *teachers* were fuzzy about the theory, a physics teacher gave a quick 10-minute overview of it.

After the analytics had shared their detailed and comprehensive lesson plans, the globals got up to share theirs. They seemed a bit sheepish. The spokesperson said, "We have to admit we didn't really hear the explanation of the theory. While the physics teacher was explaining it, we kept thinking things like: *How did Einstein think of this? Where was his laboratory—in his garage? Was Einstein married? How did he find something that would go so fast?* By the time we had worked through those questions in our minds and had tuned in to what the speaker was saying, he was finished talking. We all had the sinking feeling that we were going to look dumb . . . again."

Analytic learners who are listening for details may become particularly frustrated if instructions are repeated. They are already focused on the task and do not want to have to again listen to something they already know. On the other hand, if globals are told there will be no repetition of the instructions and they have to get it the first time, they become particularly stressed because they

know they probably won't be able to listen for everything at once.

How do you as a parent or teacher meet the needs of both analytic and global learners? Although there are no simple answers, if you make the general purpose clear before giving the *specifics*, you can often give directions without repetition. First tell us what we're going to do, then tell us how we're going to do it. For example, you may say something like, "We are going to study three major causes of the Civil War. You will need to identify two specific examples for each cause we discuss. Now, let me tell you where you can find these examples."

In some cases, if the process or concept being taught is complex, you simply have to encourage the analytics to have more tolerance for the globals. After all, if the globals didn't understand it the first time and the teacher doesn't repeat it, chances are it will be the analytic students next to these globals who will have to clarify what was said!

### ORGANIZATION AND TIME MANAGEMENT

If you were speculating about the kind of learning style a person who teaches time management classes might be, which do you think it would be? You're right! Analytics! And who do you suppose *takes* these time management classes? Right again! Globals! Although both styles can be successfully organized, they usually have very different views of how organization and time management look. Is it any wonder that the standard methods employed in classrooms and at work so often don't work?

An extremely *analytic* English teacher insisted her high school students keep their papers in a three-ring binder under specific categories. Although most students complied, one boy, a true *global*, refused to bring a notebook with him every day. He always wore a military fatigue jacket with multiple pockets and was prepared with pens and paper. Finally, out of frustration with noncompliance, the teacher decided to do something about it.

One day, she stopped her students on the way out of class and told them they must all leave their notebooks on their desks. She would look at them that night and grade them according to whether all the papers were there and filed in the proper categories. As each student placed a notebook on the desk, this particular boy shrugged off his coat, hung it on the back of his chair, and left. With a sinking feeling, the teacher checked the coat. Sure enough, each pocket was a category, and there wasn't a single paper missing!

It often makes the most sense to analytics to have a place for everything and everything in its place. Globals usually consider themselves organized if they are able to *find* something when they need it, even if they have to rummage through a whole pile of stuff to get it. Even though globals may not *appear* to be organized, you may be surprised at how quickly they can locate what they need.

Because the traditional school system is very analytically structured, the analytic learner's approach to managing time and materials fits and is greatly valued. The more global learners may struggle with organizing notebooks and materials enough to meet the grading requirements of a more analytic teacher. A global learning style often does not fit the traditional analytic school structure.

If you are the parent of a global child who seems to be constantly disorganized, try to help him understand the *need* to be organized. If the purpose of being organized is to be able to locate papers and materials later, your child needs to make sure his system (even if it looks pretty messy and disorganized to you) helps him do that. A good test is whether he can find any paper he needs in 60 seconds or less. If he can, obviously his system works, no matter how it looks. If he can't, his system needs to be improved.

When it comes to improving areas of time management and organization, globals and analytics struggle with different kinds of problems. On the following pages, you will find some of the most consistent areas of frustration for both styles and practical ways for dealing with those frustrations.

### THE DOMINANT ANALYTIC

It's hard to work with interruptions. Because the natural bent of the dominant analytic mind is to learn by thinking about one thing at a time, it is very disruptive to his concentration to be focused on a concept or an idea, and then suddenly to have to think about something else. Consequently, the analytic is often much better off studying or working alone, then joining

others for a social time *after* his work is done. If you, as a parent or teacher, think of something for the analytic to do or something you need to tell him before he finishes his current task, don't break his concentration by interrupting. Write it down and talk with him when he's finished.

There are too many places to organize at once. The dominant analytic is almost always more efficient when tasks or assignments can be divided into categories or pieces. For him, there is a much greater sense of accomplishment when he can make a big difference in a small place than when he is just barely making a small difference in a big place.

Just before our wedding several years ago, my global nature was running wild with random thoughts and last-minute tasks. I kept mentioning things to John, my analytic bridegroom. I'd say, "Don't forget you promised to mow the lawn before your mother arrives," and "Did you call that man about the contract negotiation?" and "Will you pick up the rings while you're in North Seattle?" Finally, John said, "Cindy, just make me a list." Well, I sat down and wrote out a beautiful "to do" list. I printed every item neatly, numbered each one, and put a space in front of each number so he could check it off after he had accomplished the task. I proudly presented my list, and John politely thanked me. A few minutes later as I walked through the dining room, I saw John sitting at the table recopying my list! "What's wrong with my list?" I asked.

He held up the piece of paper he was using to recopy the original list. The paper was neatly divided into four categories: "Personal," "Wedding," "Business," and "Miscellaneous." "You have everything clumped together on the same list," he replied a little incredulously. "You shouldn't have put contract negotiation (a necessary business task) and mowing the lawn (a nice thing to get done if there's time) on the same nonspecific list!" Once he had sorted my list, he began to work in earnest on accomplishing the tasks.

There needs to be some sort of system. The dominant analytic works best when there is a definite and consistent method of doing things, especially if he can create the system himself. Keeping a daily schedule and/or lists of things to do often helps the analytic keep a sense of structure and predictability. Analytics are usually most comfortable when they can set and meet specific goals, preferably on a daily basis.

### THE DOMINANT GLOBAL

It's easier to get an organizational system than to keep it. Dominant globals often have what could be called a "pile and bulldoze" system of organizing papers and materials. They start out with all the best intentions of filing things away, but after they find and use something, they frequently toss it into a to-be-filed box, intending to put it where it belongs later. Before they know it, there is a huge pile of papers that practically needs to be bulldozed. A helpful tip is to simplify the system as much as possible so it will be easy for them to put things back. Big baskets or colorful files that hold very general categories of things will encourage at least getting papers back in the right area.

Once in awhile, even globals can become overwhelmed with lack of order. When I finally get to the point of actually cleaning and organizing my office, the first thing I do is take a trip to the store. I have a wonderful time shopping among the colored baskets, plastic drawers, and portable filing systems. When I get back to the office with my bounty, I'm usually out of the mood to organize, and I happily go back to work—in the chaos.

It's too easy to become distracted. The dominantly global mind seems to be going in many directions almost all the time. Just as the global is focused on one task, something else comes up that also has to be taken care of, and instead of finishing the first task, the global begins on the new one and works until something *else* distracts him from the previous task. One of the best ways to overcome this tendency to become distracted is to work with another person. You can promise to help each other finish one thing before going on to another. It's surprising how much easier it is to concentrate when someone else is working with you!

"I'll do it" doesn't always mean "I'll do it now." Often dominantly global students have the very best of intentions, but don't always follow through quickly enough for parents or teachers who have asked them to accomplish

a task. Procrastination is a real temptation for globals, and it can cause a lot of conflict with the analytics in their lives. If you want the global to do something *now*, try offering to work with him at least to get him started. For example, as a global, I often just need a "jump-start." If you will work alongside me even for a few minutes, the chances are very good that I will go ahead and complete the task.

### GETTING THE BEST OF THE TEST

Although neither learning style necessarily *likes* tests, dominantly analytic students don't seem to feel as threatened or nervous about them as the more global students are. Dominantly global students usually take tests much more personally than their analytic classmates. Globals often believe that the teacher is out to trick them or make them feel dumb. To them the whole testing situation feels stiff and formal, and sometimes they do poorly on a test because they literally "psyche" themselves into failing.

Dominant analytic students, on the other hand, seem to approach tests with more confidence. Because the analytic nature automatically breaks down information into component parts, the analytic student has an easier time dividing a test into manageable pieces. If the analytic dreads a test, it's usually because he is not prepared and not because he feels the teacher is out to get him.

One of the biggest frustrations for globals is that they understand the whole concept but struggle with the specific and objective testing techniques that seem to suit analytics perfectly. If globals can gain more confidence in nitty-gritty test-taking skills, they will find they are much smarter than their test scores show.

Both my sister Sandee and I are global. We were talking to a physics teacher when Sandee brought up an interesting question. "If a microwave oven can make things *hot* fast, why can't they invent something that would make things *cold* fast?" The teacher smiled indulgently and stated that it was against the laws of physics. He then patiently defined and explained the law. When he finished, Sandee echoed the question on my mind. "OK, but if a microwave oven can make things *hot* fast . . ." His definition had just sped

over the top of our heads!

My husband, who is a great interpreter in such matters, stepped in. "It's like this," he explained. "Suppose you had 1,000 ping-pong balls in a net, and the net was tied to the ceiling. If you released the net, the ping-pong balls would quickly spread all over the room. That's the concept behind the microwave. In order to *reverse* the process, you'd have to gather up all the ping-pong balls, put them back in the net, and reattach it to the ceiling."

Got it. I still couldn't tell you what the law is called or take a test on it to save my life, but I understand the concept of how it works. Unfortunately for us globals, we rarely get credit in school for understanding a global concept if we can't pass a test on the analytic details.

I recently asked several groups of teenage students to give me some test-taking tips. Although the analytic groups began serious consideration right away, the globals first listed items like "Lose a contact so you can't take the test," "Stage a fire drill," and "Get a paper cut and bleed on the test so your teacher will feel sorry for you."

After some discussion, the analytic and global students who have successfully coped with all sorts of tests shared some of their secrets. It won't be hard to see the difference between these two lists!

### Test Tips from Dominant Analytic Students

- Scan the test quickly to see how many essay, multiple choice, and truefalse questions you'll have to answer. Then divide your time according to how long you have to take the test.
- Do the easy questions first; skip the ones that look hard or complex and come back to them later.
- Keep your desk or work area completely clear of clutter; it will help you concentrate during the test.
- Always have an extra pen or pencil during the test.

### Test Tips from Dominant Global Students

- Dress comfortably the day of the test.
- Eat something before the test so you won't feel hungry.
- After you have studied for the test, get together with a small group of classmates and review by testing each other.

• Don't come to class too early the day of a test or you may get confused by all the last-minute cramming.

During a short presentation at a youth conference, I noticed a seventh-grade girl listening intently and enthusiastically to everything I said about learning styles and study skills. When the session was over, she bolted out the door and I heard her yell to her friend, "Hey, Stacy! I'm not dumb—I'm *global*!"

### FIGURING OUT TEACHERS

No teacher is going to be *just* global or *just* analytic. But it is often helpful for students to look at certain teacher behaviors and preferences. It may help them understand why they are experiencing frustration in those teachers' classrooms.

Parents and students might think it would be best for the teacher and student to have the same dominant learning style. However, this is not necessarily the case. Sometimes, the best situation is for a more global student to be in an analytic teacher's classroom. The analytic teacher can give the global student much-needed structure; and sometimes an analytic student does best in a global teacher's classroom because, there, he can get the big picture rather than just focusing on details.

Since most teachers will be a *mix* of global and analytic behaviors and preferences, it is important to recognize which learning style demands the teacher is making of his students. Understanding what the teacher expects from students is more important than trying to figure out the teacher's dominant style. To help you identify which learning style your child's teacher demands, here are five basic areas where the global or analytic expectations are evident.

### Classroom Environment

You can often determine whether a teacher is more global or more analytic just by looking at his classroom. A global teacher may have a classroom that is designed to look like a home away from home. There are posters, plants, rugs, and couches. To the analytic that may look like a whole lot of junk. But to the global, it's "atmosphere."

An analytic teacher's room may look pretty bare by contrast. When you walk into the analytic teacher's classroom, you may find fire drill instructions, daily announcements, and charts and graphs relevant to the day's lesson. Anything else would be considered a distraction. Analytic teachers often keep their classrooms as clean and organized as possible so that the student can concentrate on learning and not the environment.

During a summer class for teachers, one analytic teacher admitted that she was completely prepared for the next fall. She had, in fact, layered her bulletin board so that each month would already be posted. She was soundly "booed" by the globals!

### **Classroom Organization**

Teachers with a strong analytic style will almost always have a set of classroom rules printed and distributed to students at the beginning of the year. The rules, as well as the consequences, are stated specifically so there won't be any confusion.

More global teachers will simply have one or two general classroom rules. For example, "Be kind and courteous to everyone" or "Respect others." Then, when other situations come up requiring the application of specific rules, a global teacher simply handles the problems on a case-bycase basis.

### Attitude Toward Students

Global teachers place a high priority on self-esteem and will even teach lessons on self-esteem before they teach their subject matter. The global teacher is convinced that students cannot be successful unless they first have confidence in themselves.

Now, analytic teachers *also* believe that self-esteem is important, but they believe that you achieve self-esteem by experiencing success. So dominantly analytic teachers may set high standards and may seem to be hard on their students because they want the student to succeed in order to gain self-esteem.

Sometimes it's hard for global students to feel that an analytic teacher cares very much about them. In reality both analytic and global teachers can have equal amounts of compassion, but it is just expressed in different ways.

Suppose an important faculty meeting is scheduled at 3:00 P.M. At 2:55,

an analytic teacher is rounding the corner, headed for the door of the meeting room. A distraught student intercepts him and asks for help. Chances are good that the analytic teacher will pause, calm the student as much as possible, then set a time to meet with the student later, either after the meeting or before school the next morning.

Now, let's say that the same distraught student intercepts a *global* teacher five minutes before the meeting starts. Chances are better than not that the global teacher will never make it to the meeting. Does either teacher care more? No. Both teachers have compassion but each expresses it in a different way.

### **Teaching the Content**

When it comes to teaching the content of a lesson, more analytic teachers use a lot of lectures, individual activities, and reading projects. They encourage students to work independently and may sometimes appear almost unfriendly to global students.

A more global teacher tends to use discussion, group activities, and cooperative learning. Since global teachers seek to make the subject matter personally important to every student, they often share personal experiences and expect their students to do the same. This can make an analytic very uncomfortable or impatient.

### **Grading Practices**

Analytic teachers almost always have a set grading scale. If 92-100 points is an A and a student gets 91.8 points, an analytic teacher will give the student a B. Dominant analytic teachers often have very specific grading criteria, and the student can count on that teacher to be consistent. Analytic teachers may appear not to give out many compliments, but when that teacher says "good," it may very well be the highest praise you'll receive from him or her!

Global teachers don't like to be very specific with grades. If 92 is an A and a student gets 91.8, the global teacher may say, "Close enough," depending on how hard the teacher believes the student worked. Dominantly global teachers emphasize class participation and may even grade on how often contributions are made to class discussions or group work. Global teachers

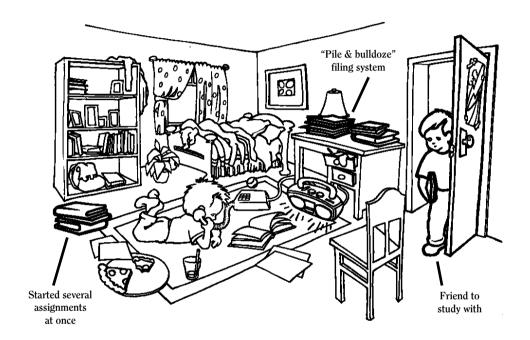
will usually give their students a lot of positive feedback, complimenting them on things that may not have anything to do with their classroom work.

Parents and students need to understand that *every* style of teacher can contribute a great deal to a student's success. The key to achieving success is how well students understand what the teacher is doing or is asking them to do.

We cannot put people in boxes and say everyone is just like everyone else who has the same learning style. We do people a terrible injustice when we categorize them. A CS, an AS, an AR, or a CR may have all of the characteristics we attribute to those categories and yet may be very global, or at the other extreme, very analytic.

This can be confusing and may not seem to fit. We may not think a CS with a global way of thinking is a possibility. But it happens. It is also possible for an AR to have a strong analytic side.

Because you are not just a "pure" learning style, add to your picture what you might find in the room that would indicate you are a global or an analytic. Look at our example of a global AR to get some ideas.



### In a Nutshell

Understanding information is fundamental to almost everything we do on a day-to-day basis. Knowing if we naturally understand information analytically or globally can help us step outside our dominant style and use a completely different style. Understanding that we can make this switch is especially valuable in an academic setting. It is equally important in the areas of business and communication in general. If I don't understand what you mean, how can I know what you're saying?





### The Difference Between Learning Style and Learning Disability



Karen was a lively, mischievous first grader when her teacher and principal began to suggest that her parents have her screened for possible hyperactivity or Attention Deficit Disorder (A.D.D.). Even though Karen was bright and creative, they explained, she simply didn't follow directions. She was often restless and had difficulty staying at a task for more than five minutes at a time. She rarely completed written assignments, and her social interactions with her classmates were frequently immature and moody.

Karen's parents took her to a pediatrician. Subsequently, she went through an intensive screening process to determine whether or not she had a learning disability. The results of the testing led the doctor to conclude that Karen, indeed, had a marginal case of A.D.D. It was recommended that Karen begin a mild dose of medication to control her behavior.

Karen's parents and grandparents were troubled at the prospect of putting their bright, cheerful, six year old on serious and regular medication. They began to explore other alternatives, and in the process, they heard about learning styles and how they affect study habits and behavior. As they began to understand Karen's natural learning style, they realized the way in which Karen learned was often not compatible with classroom demands.

For example, Karen is a very kinesthetic learner who thrives on movement combined with listening. The teacher wanted her to sit still. But her parents decided to try another approach. Instead of forcing Karen to be still and look at them when they were giving her directions, they decided to let her fidget, squirm, and look around. Then they checked to see if she had been listening and were amazed to find she could repeat what they had said almost word for word.

Karen's global nature made it possible for her to continually scan the environment, listening and paying attention to multiple voices and stimuli. Her dominantly random mind was constantly searching for alternatives and seeing possibilities not obvious to most people. Her CR characteristics made her very impatient when learning anything that didn't immediately interest her.

Her parents also discovered some emotional problems that seemed to explain Karen's sometimes immature behavior with her friends and classmates. These were addressed. Then, by helping Karen come to terms with her natural learning strengths, her parents and teacher helped her overcome many of her frustrations with the traditional classroom and learning demands. They didn't let Karen give up when something didn't make sense to her, and they encouraged her to use what came naturally to her. They challenged her to find ways she *could* be successful.

Karen's parents were wise in that they explored many alternatives for solving her difficulties with school. They made medication a last resort and not a quick fix. Although many children *do* benefit from a regimen of medication, I am encountering many teachers, physicians, and learning specialists who are concerned that far too many children are being rapidly and inappropriately labeled with A.D.D. or another disability and are being placed on medication too quickly.

Many students who are struggling in school simply have learning styles that are incompatible with the structure of the traditional classroom and academic demands. Sometimes concerned parents jump to a conclusion and believe their children may have learning disabilities or disorders of some kind because they lack success in school. To help their children succeed, parents can spend an inordinate amount of money and energy searching for programs and cures. What they need to do is take time to sort out how much of the problem might be attributable to an incompatibility of the child's learning style with the school's traditional method of teaching

Remember that a typical school classroom makes very definite learning style demands. A student is required to sit still (very difficult for the kinesthetic learner), learn quietly (not always easy for the auditory learner who needs to hear it aloud), work independently (often counter productive for the globals and ARs), and demonstrate knowledge sequentially (very frustrating for randoms and globals).

For children who possess learning styles that match academic demands, school does not normally present much of a problem. But when students find themselves at odds with school, they can become frustrated with both themselves and the system. Without a knowledge and understanding of learning styles, students often can't tell a teacher what works for them and what is difficult, nor can they develop effective strategies for coping with the opposite styles of either the teacher or the classroom.

There are more dimensions to consider. Many problems are beyond the scope of simple learning styles. Such things as family dysfunction, violence, emotional disorders, physical limitations, or chemical imbalance can affect a child's ability to learn. Often these problems require the service of medical and professional people and agencies. It is surprising to find out how much more effective the intervention of these professionals will be when we can identify the dominant learning styles of those who are *experiencing* the problems.

It is important to understand that even the best programs and approaches can work *backwards* if there isn't a significant match between the learning styles of the child and the style of the program designed to help him. If you can help your children discover and use methods that work *with* their natural style strengths instead of against them, you may find them succeeding more than you ever thought possible.

After reading this book, you already know a lot more about the individual learning styles of your children. But if you find your child in need of professional intervention, you can begin to ask some important questions of those who offer programs to help him or her. If you know your child is more

sequential, does the program offer a simple, logical structure? If your child is random, does the program offer flexibility and a personal approach?

In my work with pediatricians and learning specialists, I have found the most effective professionals are those who are committed to a balanced approach when dealing with learning difficulties. This approach takes into consideration a child's dominant learning styles as well as other factors such as mental, emotional, or physical disabilities.

Physical limitations do exist in some children, and I am grateful we have so many well-qualified and dedicated specialists to diagnose and treat these ailments. I would, however, encourage parents of struggling children to take down the lines of first defense. Before we take any drastic actions or interventions, we need to devote time and energy toward really getting to know and understand our children as individuals. We must not be too quick in assuming that the child's misbehavior or annoying habits are symptoms of a learning disorder. Sometimes we, parents, focus on how we would like our children to *act* more than what we want our children to *accomplish*. But if we focus more on *outcomes* and less on *methods*, we may find our children succeeding in ways that have never occurred to us. As you define what you are trying to get the child to do or learn—the desired result—and not on the process by which he learns, you may discover some very reasonable alternatives to traditional approaches.

Here are just a few examples of troublesome behaviors that often give parents reason to believe their child has a learning problem, when actually the behaviors may be an indication of learning styles that are incompatible with the demands being made.

### **The Problem**

The child is restless; he will not sit still.

### What Do You Need to Accomplish?

I need for him to listen attentively to the story being read.

### An Alternative

Give him the option of sitting on the floor or changing positions discreetly, as long as he does not distract those around him. Hold him accountable for being able to relate the facts or main idea of the story.

### What Do You Need to Accomplish?

I need for him to understand the concept being taught.

### An Alternative

Have him explain the concept to a parent, a teacher, or a classmate, either verbally or in written form.

### What Do You Need to Accomplish?

I need for him to follow verbal directions.

### An Alternative

Have him repeat back what he heard to check his understanding of the directions.

### What Do You Need to Accomplish?

I need for him to not distract the other children around him.

### An Alternative

Challenge him to come up with creative ways to move around without bothering anyone. For example, could he doodle, take notes, move his feet quietly?

### Combining the Alternatives for a Restless Child

A primary teacher found out for herself how much difference it could make in classroom management if she simply defined her outcomes. She had been struggling with a fidgety, strong-willed boy who refused to sit in his seat and listen to the story she was reading. In frustration, she stopped for a moment and asked herself, "What's the point? What do I need to accomplish here? Do I need him to sit in this chair, or do I need him to listen to the story?" She then gave him the option of sitting anywhere he wanted as long as he listened quietly to the story and did not disturb others around him. To her amazement, he immediately complied by sitting in the back of the room on the floor and giving her his full attention.

### The Problem

The child will not complete assignments.

### What Do You Need to Accomplish?

I need for him to finish what he starts.

### An Alternative

Help him break up the assignment into smaller, more manageable pieces. Don't insist that the whole task be done in one sitting, but hold him accountable for all the parts.

### What Do You Need to Accomplish?

I need for him to prove he knows the material.

### An Alternative

Challenge him that if he can maintain a minimum score (i.e. 92 or higher) on each test, he only has to do as much of each homework assignment he feels is necessary to master the concept.

### Combining the Alternatives for Getting a Child to Complete Assignments

Sarah was a bright, capable fifth grader who, after excelling in math during the first half of the year, suddenly decided to quit doing her math homework. Sarah's teacher and parents were concerned. Homework counted for a substantial portion of the semester grade, and now Sarah's normally excellent grade point average seemed to be in jeopardy.

I was called in to talk to Sarah to discover what might have caused this abrupt change in her behavior, as well as what might motivate her to start turning in her homework again. It didn't take long for Sarah to tell me why she no longer did her homework.

"It's too boring," she explained simply. "I hate having to do 20 problems when I understand how to do the process after doing five of them. I just decided it wasn't worth the trouble."

"Can you pass the math tests without any trouble?" I asked.

"Oh, sure," she replied. "I always get As on my tests."

After some discussions with Sarah, her parents, and her teacher, we came up with a workable solution. Sarah agreed to do at least half of her homework every night. If she got a 92 percent or better on her math test, her teacher would give her full credit for the homework assignments. If she got lower than 92 percent, she would agree to complete whichever assignments her teacher deemed necessary.

Sarah kept her end of the bargain. Some nights she did *more* than half of the homework, because now she knew she was only doing what she needed to do in order to master the concept. She never did fall below a 92 percentile on any math test the rest of the year.

### The Problem

The child won't stay at a task for more than a few minutes.

### What Do You Need to Accomplish?

I need for him to learn to focus on one thing at a time.

### An Alternative

Provide him with some options. Decide what needs to be done, then offer one or two ways to do it. Let him switch ways in the middle if he wants to, and let him keep on the move whenever possible while doing the task. Insist he do only one thing at a time, even if he quickly switches from one task to another. Help him identify which method he is using each time he changes direction.

### What Do You Need to Accomplish?

I need for him to do it my way!

### An Alternative

As parents, we have to admit that sometimes it's just plain easier for us if our children will do it our way. Try explaining to your child *why* you think your way will work, then offer to let your child try another method as long as he can prove his way will accomplish the same goal. The hardest part of this suggestion is the patience and tolerance it may take on your part to let your child try out the alternatives!

### Combining the Alternatives for Getting a Child to Stay at a Task

I received a letter several years ago from a mother who attended one of my seminars. It remains one of my very favorites because it illustrates how one mom discovered the value of letting her son choose his own way to accomplish a goal. This mother writes:

Style awareness has changed our lives. I look for ways to have Dan be creatively successful. We have a small farm, and Dan has an acre he has begrudgingly taken care of for four years. He waters with a hose and sprinkler. It's a real pain, and he tells me so regularly. I suggested he brainstorm solutions to the watering problem and then make a list of the five ways he thought he could do better. He would then "sell" his choice to me. We have two greenhouses (25' x 50') we no longer use. He suggested a water system using salvaged plastic pipe from the greenhouses. I thought it was a great idea, provided (a) he could do it with materials we had, and (b) it would wet the whole garden all at once or in sequence. I suggested he play with hoses and sprinklers to see what the pump capacity was. He's 11 years old. He agreed and worked at it for a week.

It took a whole week of devotion, commitment, and an expressed need for privacy. He used about six times the pipe I would have used, and I'm *sure* every T, union, plug, and clamp on the property. But he did it all by himself, and it *does* water the whole acre in three rotations. The middle set spells his name when the water comes on. The system is as unique as Dan!

Don't fall into the trap of believing your child is smart and successful only if he or she does well in the traditional classroom. There are *many* ways of being smart. If you as a parent can help your child discover areas of intelligence and then reinforce that intelligence, you help build your child's confidence and abilities more than you could ever have imagined. Even if you believe your child is suffering from a legitimate learning disability or disorder, you can greatly increase your child's chances of success by determining natural learning style strengths and deciding how much of his frustration and difficulty is a matter of learning style differences and how much is a genuinely physical or emotional problem.

David was an angry, rebellious 15 year old. His parents were at the end of their rope. They had had conferences with teachers, counseled with psychologists, conferred with medical specialists, and prayed with clergy. They had tried punishment, rewards, discussion, threats, and ultimatums. Instead of improving, David steadily become more out of control. When David ran away for the third time in six months and was arrested for shoplifting, his parents were ready to take drastic action. They arranged to have him involuntarily committed to a youth facility where he would be locked up 24 hours a day. There he would undergo a regimented program designed to instill respect and appropriate behaviors through strict authoritarian discipline.

Just before David's scheduled commitment, his parents attended my seminar about learning styles. When they heard about the strong-willed, Concrete Random style, they immediately recognized their son. As they discovered how the CR mind works and identified strategies for motivating and disciplining a CR, their approach with David began to change. During the last seminar session when they were asked how they were doing with David, they made a statement that startled the rest of the group.

"Last night we asked David to forgive us." They went on to explain. "We told him we were sorry for not taking into account his *design*. We don't apologize for the outcomes we've expected, but we realize now that we could have handled many situations in ways that respected how his mind works. We could have helped him know how valued he is as a member of our family."

In the days and weeks that followed, David's parents talked to him about bottom lines, about outcomes and consequences. Then they gave David the opportunity to tell them what *he* could live with and what he couldn't. With the help of an understanding counselor, they are beginning a healing process that will make them a family again.

David realizes that he still must pay the consequences for his rebellion and criminal behavior. Although the youth facility is a very effective program for some styles, David's parents recognized that the program's approach would likely work backwards for David's style. With David's input and the counselor's help, they have found a rehabilitation program that makes sense to his CR nature. Progress is slow and sometimes painful, but David and his parents are convinced that recognizing and appreciating different styles is helping them put their family back together again.

So much of what we parents perceive as our children's deliberate attempts to annoy and frustrate us are actually a difference in approach and perspective. If we can learn to discern what is a learning style difference and how much is true disobedience or defiance, we will be much wiser parents.

I was conducting a seminar at a retreat for day-care teachers and staff. We had divided the group into randoms and sequentials, and I asked both groups the same question.

"If you could never have another raise in pay, what could your organization do to keep you happily working?"

The answer was almost unanimous: "Don't make us work with any 'difficult children.' "

When I asked them to define the "difficult child," the contrast between the groups was very evident. The sequential teachers claimed that the difficult children were those who were so random that they couldn't seem to follow the simplest directions. These children were spontaneous, unpredictable, and often disorganized.

The random teachers disagreed with the others. They claimed that difficult children were the more sequential ones. They were picky and structured, and they never seemed to "lighten up." These sequential children demanded predictable schedules and prompt attention to detail.

In the end, we all came to the same important conclusion. There really isn't a definitive "difficult child." The child who is most difficult is the one who doesn't think like we do!

### In a Nutshell

We have spent quite a bit of time in this book trying to identify the consistent patterns of individual learning styles. Although we can learn to accommodate many of those styles, we'll never really be able to neatly label or categorize anyone. Because each human being is so complex, we may never fully appreciate all our differences.

It's never been more important to help our children succeed in a world that is often difficult to understand. It can make a difference with *your* children if you will devote time and energy to discovering *the way they learn*.



### **Endnotes**

### Chapter Two

1. Order the *Adult Style Delineator* from Anthony F. Gregorc, 15 Doubleday Rd, Columbia, Connecticut 06237 or call (203) 228-0093.

### Chapter Seven

1. Kenneth and Rita Dunn are the authors of several books (see bibliography) and editors for *Learning Styles Network*. Contact: The Center for the Study of Learning Styles, St. John's University, Jamaica, N.Y.

### Chapter Eight

1. *The Swassing-Barbe Modality Index*. Administered individually, 20 minutes, all ages, patterns are presented in each modality and must be retained and repeated. Available from Zaner-Bloser, Inc., Columbus, Ohio.

### **Chapter Nine**

1. Herman A. Witkin, "Cognitive Styles in the Educational Setting," *New York University Education Quarterly*, 1977, pp. 14-20.

Herman A. Witkin et. al., "Field Dependent and Field-Independent Cognitive Styles and Their Educational Implications," *Review of Educational Research*, Winter 1977, vol. 47, No. 1, pp. 1-64.

### An Introductory Annotated Bibliography for Parents

Armstrong, Thomas. In Their Own Way. New York: St. Martin's Press, 1987.

The first book of a man who, after being a learning disabilities specialist for 16 years, decided there was really no such thing as a "learning disability." He challenges the traditional way of schooling, and gives hope and practical suggestions for parents who believe their children *can* learn, but must do it in their own way.

Armstrong, Thomas. 7 Kinds of Smart. New York: Penguin Books, 1993.

Armstrong's latest and perhaps most enlightening book. Using Howard Gardner's model of Multiple intelligences, he presents easily understood descriptions of the seven intelligences, as well as a list of 25 ways to help your child develop each one.

Barbe, Walter B. *Growing Up Learning*. Washington, D.C.: Acropolis Books, 1985. Although this book is currently out of print, you'll find your trip to the library to read it well worth your while! The former editor of *Highlights Magazine* shares a wealth of information about auditory, visual, and kinesthetic modalities. You'll find age-appropriate checklists and dozens of suggestions for helping your child learn in many different ways.