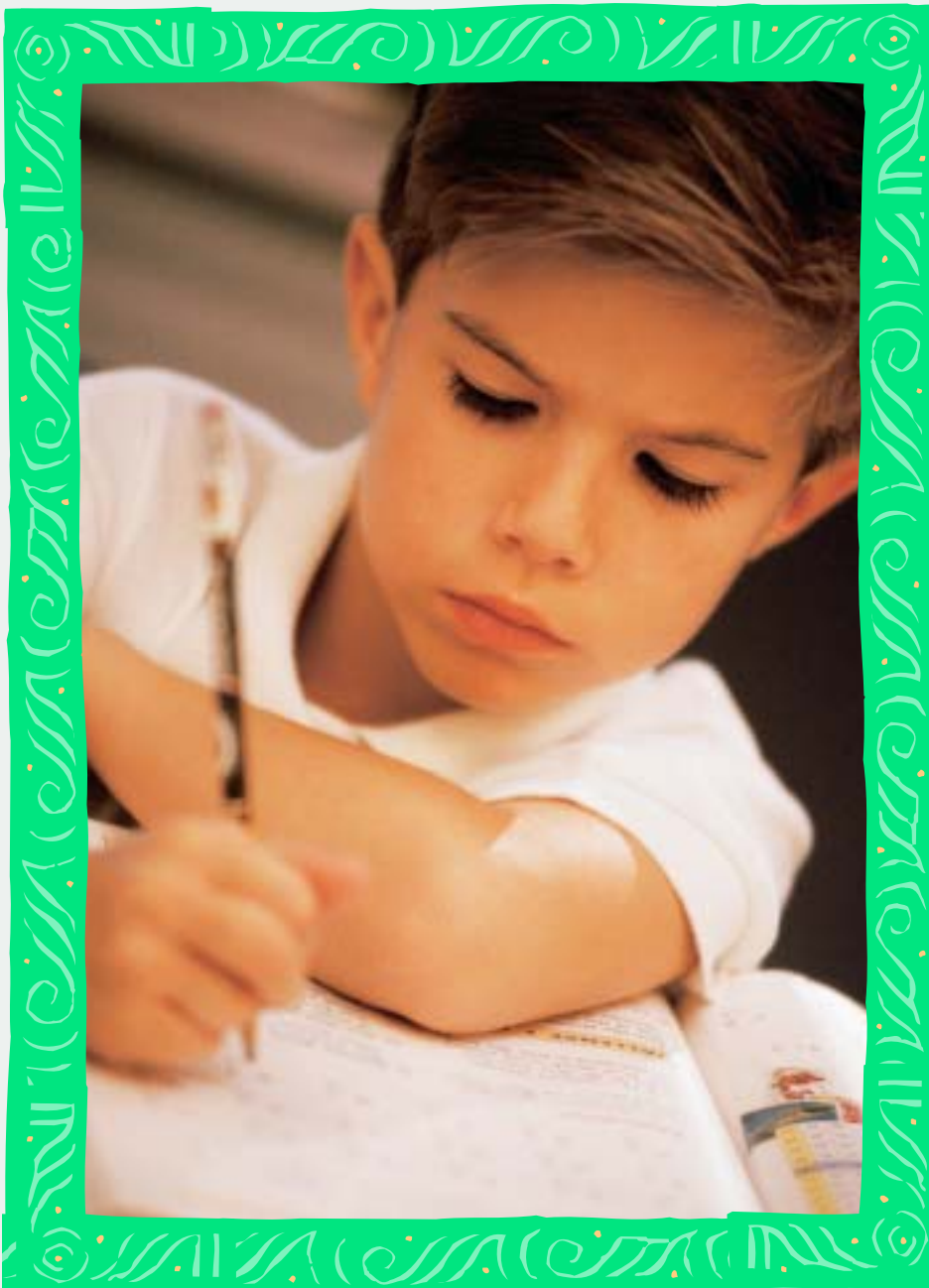


# What do you know ABOUT Learning STYLE?

A GUIDE  
FOR  
PARENTS  
OF  
GIFTED  
CHILDREN

by Rita Dunn, Karen Burke & Janet Whitely



Mark does homework curled against pillows and cushions he places on his bedroom floor. Before he opens a book, he ties a bandanna around the shade of his desk lamp, turns on his wrap-around-music system, and surrounds himself with snacks. Mark intermittently takes breaks to telephone a classmate or watch a sports event on television for 10-15 minutes before he returns to studying. If you were Mark's parent, would you be concerned about this homework pattern?

Most parents think that their offspring will learn as they do! That only happens half the time; our studies suggest that the first two siblings in many families learn differently, and often in diametrically opposite ways. How people learn is called their learning style. Everyone has a learning style but, in the same family, spouses often tend to learn differently from each other, and each of their children's styles differ from each other and from one of their parents' styles.

There is no good or bad learning style; each enables that person to learn. However, many parents and teachers do not understand and, therefore, do not acknowledge children's diverse learning patterns. When those adults disparage how certain children try to learn, they inadvertently encourage those youngsters to study in the wrong way (for the youngster). This scenario is particularly

accurate for many talented youngsters whose learning style preferences also differ from those of other learners.

### WHAT IS LEARNING STYLE?

We define learning styles as the different ways in which an individual begins to concentrate, process, internalize, and remember new and difficult academic knowledge. Many children understand and master basic ideas and information without using their unique learning styles. But even adults do not learn new and complex knowledge without capitalizing on their styles. When people use, rather than ignore their natural styles, they learn more, more quickly, and with less frustration than they do when trying to use someone else's style. That is why using your learning style is the same as using your strengths.

### HOW THE ENVIRONMENT AFFECTS LEARNING

Relatively few parents tell their children about learning styles; fewer teach

them how to use their learning-style strengths. Those learning-style strengths are affected by where individuals try to learn. Thus, some very talented children need to learn in an environment that is very different from where other children need to learn. While concentrating, some learners require:

- Quiet, whereas others need sound (music, voices, waves crashing, or birds singing). The latter may actually hum or talk to themselves to create a sound-packed environment that allows them to “think”;
- Bright light, whereas others need diffused or soft illumination. Some people wear caps with visors or sun glasses inside their homes; those items allow them to “relax” while learning;
- Warmth; others literally think better in cool temperatures; and
- Formal seating, such as a desk and wooden, plastic, or steel chair; others learn better when relaxed in an easy chair or on a bed or carpeting.

### HOW PHYSIOLOGY AFFECTS LEARNING

Children's physical beings affect how they learn and are

part of their learning style. Thus, some are required to:

- Concentrate in the early or late morning, whereas others do not “come alive” until afternoon; some are foggy all day and first become energized at night. See Figure 2 to identify when, during a 24-hour period, you, your spouse, and each of your children have energy highs, concentrate best and, therefore, should study.
- Eat or drink while they are concentrating; others only can nibble or snack after studying when they relax.
- Move about from one part of the environment (at home or in the classroom) to another or they lose a lot of their ability to focus; others do not need to move about.
- Hear information to make sense of it, whereas others must see or visualize it.
- Some of our research also suggests that as many as 15-20% of extremely able children engage in complex reasoning when their bodies are in motion. Such highly alert and energetic youngsters rarely sit “still.” Another 15-20% seem to need to have their hands actively involved while their brains are working.

## DUNN AND DUNN LEARNING STYLES MODEL

(Dunn and Dunn, 1993, p.4.)

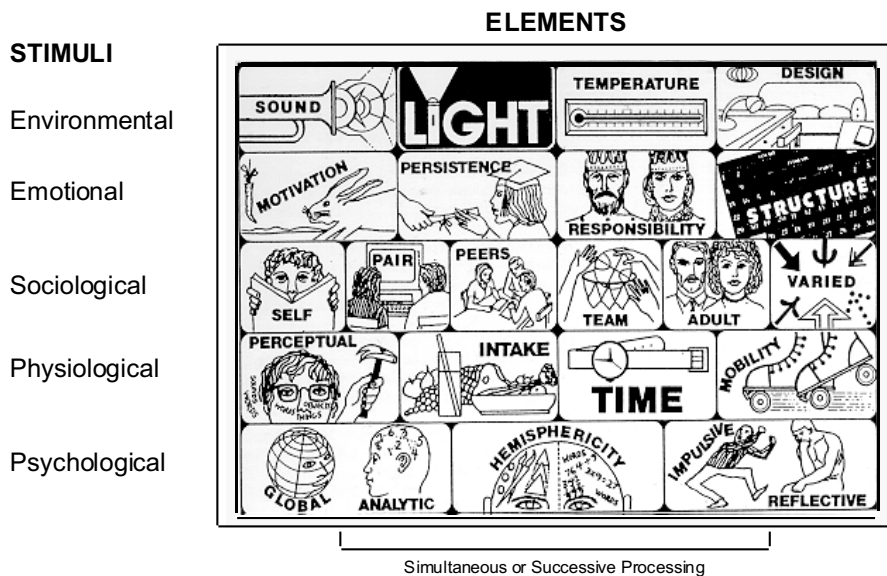


Figure 2

## Questionnaire on Time-of-Day

Directions: Answer TRUE or FALSE to each of the following questions, including all the parts of Question # 15. If you answer is, "It Depends," leave the space blank.

	TRUE	FALSE
1. I usually hate to get up in the morning!	_____	_____
2. I usually am wide-awake at night!	_____	_____
3. I wish I could sleep late each morning!	_____	_____
4. I stay awake for a long time after I go to bed.	_____	_____
5. I only feel wide-awake after 10:00 A.M.	_____	_____
6. If I stay up very late at night, I get too sleepy to remember anything.	_____	_____
7. I usually feel "low" after lunch.	_____	_____
8. When I have to do a task that requires concentration, I get up early in the morning.	_____	_____
9. When I can, I do most concentration-requiring tasks in the afternoon.	_____	_____
10. I usually begin the tasks that require the most concentration after dinner.	_____	_____
11. I could stay up all night!	_____	_____
12. I wish I didn't have to go to work before noon!	_____	_____
13. I wish I could stay home during the day and go to work at night.	_____	_____
14. I like going to work in the morning!	_____	_____
15. I remember things best when I concentrate on them:		
a. in the morning		
b. at lunchtime		
c. in the afternoon		
d. before dinner		
e. after dinner		
f. late at night		

### HOW PROCESSING AFFECTS LEARNING

One important dimension of learning style involves determining whether a child thinks more analytically or more globally. Analytic thinkers begin to process information or work in a step-by-step sequence. They keep at a task until they have learned what they need or want to, or have accomplished what they set out to do. Global thinkers, on the other hand, begin to process information by thinking of everything related to what they need or want to want to learn. They do take many breaks but, eventually, focus on the most salient points and get the task done.

Both types of processing—analytic and global—are good, but the children who have one style, as opposed to the other, learn very differently from each other (see Figure 3).

Figure 3 indicates a few ways that you can tell if anyone in your family is more analytic than global or vice versa. Anyone with three or more characteristics in one column tends to reflect that processing style. Four characteristics in the same column indicate a strongly analytic or global learner, and five in the same column suggest that a person has a very strong need to learn that way—strong enough that learning in other ways is likely to be extremely difficult. Mixed characteristics (fewer than three

in one column but a couple in both) usually describe an integrated processor—someone who learns in both ways but only when he or she is interested in what is being learned.

### HOW EMOTIONS AFFECT LEARNING

For many, motivation is strongly linked to how well they achieve. Many gifted children enjoy learning new and difficult material; it makes them feel accomplished. Other children strive for good grades because they want their teachers', parents', or friends' approval. That is not negative; whatever works is good!

When children are interested in what they are learning, they become increasingly motivated. Obviously, the reverse is true too. That is why motivation changes day-to-day, teacher-to-teacher, and class-to-class. The relationship between interest and motivation is crucial for talented youngsters who often spend hours, days, weeks, or years deeply involved in what absorbs them. Indeed, that sustained interest over time is an essential factor in giftedness and talent development in young people.

Persistence refers to each child's ability to stay with a task until it is accomplished whereas responsibility is more closely related to some children's emotional need to do what others have told them they should. Some youngsters enjoy doing the opposite of what they should do and are called nonconforming. These children rarely respond well to authoritative adults. If you have a nonconforming child in your family, (a) speak collegially (as if to a respected friend), (b) explain why the action or behavior you want from the youngster is important to you, and (c) give the youngster choices for how to do what you want done.

Children also differ in their need for structure. Some want a great deal of direction and feel best when they know what is required and how to proceed. Such youngsters appreciate specific directions and models to follow.

Conversely, children who prefer less structure enjoy doing things their way. Such individuals want to know what has to be done, but want to do it their way. These children often are extremely creative; they enjoy options and like stretching their minds and using their innate abilities.

### HOW SOCIAL CHOICES AFFECT LEARNING

Some children learn best when they are able to work and interact with other children. Interaction stimulates and motivates them. Working together develops some social skills. Other students—often the brightest and most analytic—learn best by themselves. Once they have mastered the content, they often can work with others but really prefer working alone. Whenever you urge your children to play or work with others, remember that most gifted and talented youngsters prefer concentrating either alone or with an authority.

### DO GIFTED OR TALENTED CHILDREN LEARN DIFFERENTLY FROM OTHERS?

Children's learning styles differ when they are high- versus low-academic achievers.

Although gifted youngsters learn differently from each other, and under-achievers have differing learning-style patterns, gifted and underachieving students have significantly different learning styles and often do not perform well with the same methods.

Interestingly, when we studied gifted adolescents in nine diverse cultures, the students with talents in athletics, art, dance, leadership, literature, mathematics, or music evidenced essentially similar learning-style characteristics to other learners (in different cultures) who shared a common talent area. That is, talented dancers or talented musicians in any one culture tended to have similar learning style strengths to those of students with similar talents in the other cultures. Students with similar talents from different cultures had greater similarity of learning-style preferences than did differently talented students from the same culture.

Our research also suggests that there are several common patterns of learning-style differences between boys and girls. Boys, more than girls, tend to be kinesthetic and tactual, needing an informal design and the freedom to move around when concentrating on academic studies. Their third modality strength, if one is evident, is often

visual. As a group, boys tend to learn less by listening, and they are more nonconforming and peer motivated than girls. Girls, more than boys, learn by listening, and they often are more conforming, authority-oriented, and better able to sit passively at conventional desks and chairs. Girls also tend to need significantly more quiet while learning. Despite these facts, all girls and all boys do not behave identically. But that the two groups have different learning-style strengths is indisputable.

Learning styles often change as children move from elementary to middle school, and between middle school and high school. They continue to change in college and during adulthood, and the styles of older adults in the 65-85 year-old range differ in many ways from those of younger people. Nevertheless, individuals change in unique ways. Some people hardly change at all and others change more than once as they mature.

**Sociological preferences.** Preferences for learning (a) alone, (b) with peers, (c) with an authoritative versus a collegial teacher, and (c) with routines and patterns, as opposed to in a variety of social groupings, develop over time, change with age and maturity, and are developmental. Young children tend to

Figure 3

#### ANALYTIC PROCESSORS LEARN BEST WITH:

#### GLOBAL PROCESSORS LEARN BEST WITH:

QUIET

SOUND (Music or Voices)

BRIGHT ILLUMINATION

SOFT ILLUMINATION

FORMAL SEATING

INFORMAL SEATING

SNACKING WHEN RELAXED

SNACKING WHILE CONCENTRATING

PERSISTENT ON-TASK BEHAVIOR

FREQUENT BREAKS

WORK WITH OTHERS (WHEN BEGINNING A TASK)

enter the primary grades highly parent-, teacher-, and/or adult-motivated. Many become peer motivated by fifth or sixth grade and remain that way until approximately ninth grade when they often become self-motivated. High-ability children tend to become self-motivated early, frequently by first or second grade, and rarely experience a peer-motivated stage. Underachievers become peer motivated earlier than average students and tend to remain that way longer—often well past adolescence.

**Emotional preferences.** Motivation, responsibility (conformity versus nonconformity), and the need for internal versus external structure are perceived as developmental. Motivation fluctuates day-to-day, class-to-class, and teacher-to-teacher. Many people experience several stages of nonconformity, which correlate with high and low “responsibility” levels. The first period of non-conformity occurs for many between the second and third years of life. In the United States, that period euphemistically is called, “the terrible twos” and coincides with children beginning the pattern of saying, “no!” For most children, that stage lasts for less than a year. The second period of nonconformity often begins at about sixth grade and tends to last until ninth or tenth grade for many average children. Underachievers and some gifted students often remain nonconforming until well past high school; others into adulthood.

**Perceptual preferences.** Young children tend to understand best the things they can touch, play with, or handle. We call that tactual learning. By the time they enter school, tactual learners can remember three quarters of the information they write about or draw. Kinesthetic learners understand and remember best information they experience actively. Kinesthetic preschoolers learn from doing things. When they are older, simulations, pantomime, performing (as in a play, chorus, or band), or interning permit these students to absorb complex information.



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strengths.

Data from our research indicate that less than 12% of elementary-school children are auditory. Few children (or adults) are likely to remember at least 75% of the academic information they hear during a 30-40 minute period. In addition, we have found that less than 40% of students are visual learners. Few children (or adults) can remember at least 75% of what they read during a 30-40 minute interval.

The older children become, the more their auditory and visual modalities develop. However, many adult males are neither auditory nor visual learners; some remain essentially tactual or kinesthetic all their lives. Poorly achieving students in traditional schools tend to be only tactual and/or kinesthetic. However, when taught with tactual or kinesthetic approaches or resources—rather than with lectures or readings—these children perform well. When taught the way they learn, these youngsters achieve significantly higher on tests and enjoy school more than when they are taught traditionally! We believe, then, that perceptual preferences are very important to effective learning for students at all ability levels, and for those who are not doing well in school as well as for helping successful students be at their best.

#### HOW CAN PARENTS USE THIS LEARNING-STYLE INFORMATION

High-ability children can be either analytic or global. If they learn analytically, they easily conform to the behaviors required by traditional teachers because they naturally learn that way. On the other hand, global children have a more difficult task conforming in conventional schools because those requirements are so at odds with the natural ways in which they learn. Global learners naturally:

- hum to themselves to provide the sound they crave while concentrating;
- seem to be hyperactive and tense in brightly-lit rooms;

- can't sit in regular classroom furniture for more than 10-15 minutes without sprawling, extending their feet into the aisle, and moving; and
- snack, whisper, crouch, and lose interest in analytic teaching.

If they cannot remember three quarters of what they hear, they may listen to the teacher, but not retain it. If they learn by seeing, listening does not help. If they learn through pictures and drawings (as many young global children do), reading printed matter will not entice them. If they are tactual learners, they tap their desks, touch items, "play" with whatever gets into their hands, and write poorly. If they learn kinesthetically, while actively engaged in doing, their teachers perceive them as being hyperactive, restless, and often "unable" or "not ready to learn."

If they are not "morning" learners, their teachers think you allowed them to remain up until well past their bedtime. If they happen to be evening learners, you probably have admonished them to "go to bed" just when they are experiencing their energy high.

## AT SCHOOL

Consider the following tips.

- Don't fall into the trap of thinking that because your children may be doing well in school, there is no need to urge their teachers to identify and respond to their learning-style strengths. Many gifted children become bored or irritated in school precisely because they are required to follow the same rules in the same way and in the same amount of time as everyone else. Teachers tend to say that it is "fair" to treat everyone in the same way! Instead of being fair, it is being arbitrary, capricious, and unfair to require that children who think creatively, faster, and more divergently than their peers must:

- sit and wait until everyone else has finished the class assignment;
- help slower children who take longer than everyone else;

- work at the academic level of the average child in the class instead of competing with their equally talented or gifted peers.

- Praise your children for doing well in whatever it is they do well. Each has unique talents and no one is talented in every area. Encourage them to excel in whatever it is that interests them.
- It is important to make your child's teacher aware of his/her learning style.
- It always is important to make your children aware of their styles—and why they feel uncomfortable when they are not permitted to learn their way.
- Obtain "Homework Prescriptions" that describe how your children should study through their individual learning-style strengths. Anticipate that each child in your family will receive suggestions that differ from those given to their siblings. Guidelines based on learning-style strengths make studying easier and more enjoyable than the usual study skills suggested for everyone.
- If your child is experiencing school-related problems, learn as much as you can about learning style before making any judgments about causes or responses.

## AT HOME

Provide the kind of study environment in which each child functions best. They need to feel confident that you understand and appreciate their learning-style patterns. They also need to recognize that everyone needs to learn. Don't permit one person's working and learning preferences and styles to interfere with another family member's. Help them to find alternative ways of working in which their styles do not distract others

- Don't force your gifted child either to play or to work with others just

because they are the same age. High-ability children very often think differently and quickly become bored or irritated by the pedantic thinking of less-able children of the same age.

- Children need to find a place in their environment—both at home and at school—in which to feel comfortable. Develop your child's awareness of sound, light, temperature, and seating preferences and help to identify what is best in different situations.
- After taking learning-style characteristics into account, determine whether your child learns best alone, in a pair, as part of a team, with adults, or in any combination of these. Whatever the preference, adopt it for at least a short period of time to determine whether your child actually performs best that way.

*continued on page 30*

## FOR MORE INFORMATION

*For more information about the Dunn and Dunn learning styles approach, and about materials relating to this approach, contact:*

St. John's University  
Center for the Study of  
Learning and Teaching Styles  
8000 Utopia Parkway  
Jamaica, NY 11439

Visit the International Learning Styles Network on the World Wide Web at:  
<http://www.learningstyles.net>.

Another site with related information about assessing children's learning styles using the Dunn and Dunn approach is: [www.learningstyles.com](http://www.learningstyles.com).

# What do you know ABOUT Learning STYLE?

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- Do not be concerned with the amount of time it takes children to do home work. They may move faster in the “wrong” style, but they will remember what they study better and longer in their “right” style.
- Almost two fifths of style seems to develop over time and gradually changes as children age and mature. Test for learning style any youngster who may not be performing well in school to know how to help him/her. Everyone can learn; however, half the population learns differently from the other half.

Back to Mark. Now that you know a little about learning styles, you understand that he prefers informal seating, low light, music, and snacks while learning. He also takes breaks, but does finish his homework. Undoubtedly, Mark is global. If his grades are good, his parents need have no concern. If his grades are not good, they ought to have him tested for learning style and then encourage him to follow the suggested guidelines for doing homework. 🏠

## RECOMMENDED READINGS

Dunn, R., & Dunn, K. (1977). *How to Raise Independent and Professionally Successful Daughters*. Englewood Cliffs, NJ: Prentice Hall, Inc.

Dunn, R., Dunn, K., & Treffinger, D. (1992). *Bringing Out the Giftedness in Your Child: A Guide for Parents*. New York: John Wiley & Sons.

*Rita Dunn is professor, Division of Administrative and Instructional Leadership, and director, Center for the Study of Learning and Teaching Styles at St. John's University, New York.*

*Karen Burke is assistant professor, Child Study Program at St. Joseph's College, New York. She has authored several chapters and articles in recent publications and is a Certified Learning Styles Trainer.*

*Janet Whitely is assistant professor at Tarleton State University, Texas.*