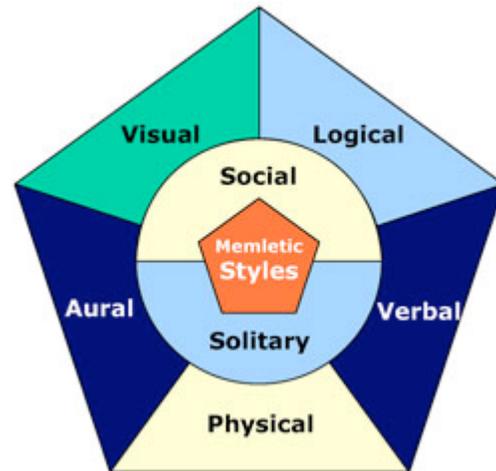


Overview of Learning Styles

Many people recognize that each person prefers different learning styles and techniques. Learning styles group common ways that people learn. Everyone has a mix of learning styles. Some people may find that they have a dominant style of learning, with far less use of the other styles. Others may find that they use different styles in different circumstances. There is no right mix. Nor are your styles fixed. You can develop ability in less dominant styles, as well as further develop styles that you already use well.



Using multiple learning styles and “multiple intelligences” for learning is a relatively new approach. This approach is one that educators have only recently started to recognize. Traditional schooling used (and continues to use) mainly linguistic and logical teaching methods. It also uses a limited range of learning and teaching techniques. Many schools still rely on classroom and book-based teaching, much repetition, and pressured exams for reinforcement and review. A result is that we often label those who use these learning styles and techniques as “bright.” Those who use less favored learning styles often find themselves in lower classes, with various not-so-complimentary labels and sometimes lower quality teaching. This can create positive and negative spirals that reinforce the belief that one is “smart” or “dumb.”

By recognizing and understanding your own learning styles, you can use techniques better suited to you. This improves the speed and quality of your learning.

The learning styles are:

- **Visual (spatial)**. You prefer using pictures, images, and spatial understanding.
- **Aural (auditory-musical)**. You prefer using sound and music.
- **Verbal (linguistic)**. You prefer using words, both in speech and writing.
- **Physical (kinesthetic)**. You prefer using your body, hands and sense of touch.
- **Logical (mathematical)**. You prefer using logic, reasoning and systems.
- **Social (interpersonal)**. You prefer to learn in groups or with other people.
- **Solitary (intrapersonal)**. You prefer to work alone and use self-study.

Why Learning Styles? Understand the basis of learning styles.

Your learning styles have more influence than you may realize. Your preferred styles guide the way you learn. They also change the way you internally represent experiences, the way you recall information, and even the words you choose. We explore more of these features in this chapter.

Research shows us that each learning style uses different parts of the brain. By involving more of the brain during learning, we remember more of what we learn. Researchers using brain-imaging technologies have been able to find out the key areas of the brain responsible for each learning style. For example:

- **Visual.** The occipital lobes at the back of the brain manage the visual sense. Both the occipital and parietal lobes manage spatial orientation.
- **Aural.** The temporal lobes handle aural content. The right temporal lobe is especially important for music.
- **Verbal.** The temporal and frontal lobes, especially two specialized areas called Broca's and Wernicke's areas (in the left hemisphere of these two lobes).
- **Physical.** The cerebellum and the motor cortex (at the back of the frontal lobe) handle much of our physical movement.
- **Logical.** The parietal lobes, especially the left side, drive our logical thinking.
- **Social.** The frontal and temporal lobes handle much of our social activities. The limbic system (not shown apart from the hippocampus) also influences both the social and solitary styles. The limbic system has a lot to do with emotions, moods and aggression.
- **Solitary.** The frontal and parietal lobes, and the limbic system, are also active with this style.

The visual (spatial) learning style

If you use the visual style, you prefer using images, pictures, colors, and maps to organize information and communicate with others. You can easily visualize objects, plans and outcomes in your mind's eye. You also have a good spatial sense, which gives you a good sense of direction. You can easily find your way around using maps, and you rarely get lost. When you walk out of an elevator, you instinctively know which way to turn.

The whiteboard is a best friend (or would be if you had access to one). You love drawing, scribbling and doodling, especially with colors. You typically have a good dress sense and color balance (although not always!).

The aural (auditory-musical-rhythmic) learning style

If you use the aural style, you like to work with sound and music. You have a good sense of pitch and rhythm. You typically can sing, play a musical instrument, or identify the sounds of different instruments. Certain music invokes strong emotions. You notice the music playing in the background of movies, TV shows and other media. You often find yourself humming or tapping a song or jingle, or a theme or jingle pops into your head without prompting.

The verbal (linguistic) learning style

The verbal style involves both the written and spoken word. If you use this style, you find it easy to express yourself, both in writing and verbally. You love reading and writing. You like playing on the meaning or sound of words, such as in tongue twisters, rhymes, limericks and the like. You know the meaning of many words, and regularly make an effort to find the meaning of new words. You use these words, as well as phrases you have picked up recently, when talking to others.

The physical (bodily-kinesthetic) learning style

If the physical style is more like you, it's likely that you use your body and sense of touch to learn about the world around you. It's likely you like sports and exercise, and other physical activities such as gardening or woodworking. You like to think out issues, ideas and problems while you exercise. You would rather go for a run or walk if something is bothering you, rather than sitting at home.

You are more sensitive to the physical world around you. You notice and appreciate textures, for example in clothes or furniture. You like "getting your hands dirty," or making models, or working out jigsaws.

You typically use larger hand gestures and other body language to communicate. You probably don't mind getting up and dancing either, at least when the time is right. You either love the physical action of theme park rides, or they upset your inner body sense too much and so you avoid them altogether.

When you are learning a new skill or topic, you would prefer to "jump in" and play with the physical parts as soon as possible. You would prefer to pull an engine apart and put it back together, rather than reading or looking at diagrams about how it works.

The thought of sitting in a lecture listening to someone else talk is repulsive. In those circumstances, you fidget or can't sit still for long. You want to get up and move around.

The logical (mathematical) learning style

If you use the logical style, you like using your brain for logical and mathematical reasoning. You can recognize patterns easily, as well as connections between seemingly meaningless content. This also leads you to classify and group information to help you learn or understand it.

You work well with numbers and you can perform complex calculations. You remember the basics of trigonometry and algebra, and you can do moderately complex calculations in your head.

You typically work through problems and issues in a systematic way, and you like to create procedures for future use. You are happy setting numerical targets and budgets, and you track your progress towards these. You like creating agendas, itineraries, and to-do lists, and you typically number and rank them before putting them into action.

Your scientific approach to thinking means you often support your points with logical examples or statistics. You pick up logic flaws in other people's words, writing or actions, and you may point these out to people (not always to everyone's amusement).

You like working out strategies and using simulation. You may like games such as brainteasers, backgammon, and chess. You may also like PC games such as Dune II, Starcraft, Age of Empires, Sid Meier games and others.

The social (interpersonal) learning style

If you have a strong social style, you communicate well with people, both verbally and non-verbally. People listen to you or come to you for advice, and you are sensitive to their motivations, feelings or moods. You listen well and understand other's views. You may enjoy mentoring or counseling others.

You typically prefer learning in groups or classes, or you like to spend much one-on-one time with a teacher or an instructor. You heighten your learning by bouncing your thoughts off other people and listening to how they respond. You prefer to work through issues, ideas and problems with a group. You thoroughly enjoy working with a "clicking" or synergistic group of people.

You prefer to stay around after class and talk with others. You prefer social activities, rather than doing your own thing. You typically like games that involve other people, such as card games and board games. The same applies to team sports such as football or soccer, basketball, baseball, volleyball, baseball and hockey.

The solitary (intrapersonal) learning style

If you have a solitary style, you are more private, introspective and independent. You can concentrate well, focusing your thoughts and feelings on your current topic. You are aware of your own thinking, and you may analyze the different ways you think and feel.

You spend time on self-analysis, and often reflect on past events and the way you approached them. You take time to ponder and assess your own accomplishments or challenges. You may keep a journal, diary or personal log to record your personal thoughts and events.

You like to spend time alone. You may have a personal hobby. You prefer traveling or holidaying in remote or places, away from crowds.

You feel that you know yourself. You think independently, and you know your mind. You may have attended self-development workshops, read self-help books or used other methods to develop a deeper understanding of yourself.

You prefer to work on problems by retreating to somewhere quiet and working through possible solutions. You may sometimes spend too much time trying to solve a problem that you could more easily solve by talking to someone.

You like to make plans and set goals. You know your direction in life and work. You prefer to work for yourself, or have thought a lot about it. If you don't know your current direction in life, you feel a deep sense of dissatisfaction.