

CHAPTER 3

Learning Styles and Personality

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Perhaps you find history easier than mathematics or biology easier than English. Part of the explanation has to do with what is called your learning preferences—the way you prefer to acquire knowledge, which is a part of your overall personality.

Learning preferences affect not only how you absorb material as you study but also how you draw conclusions from it. Some students learn more effectively through visual means, others by listening to lectures, and still others through class discussion, hands-on experience, memorization, or a combination of these.

Visual learners have to “see it to believe it.” They may have artistic abilities, may find some sounds irritating, and may have trouble following lectures. They may do better using graphics as a learning aid. They tend to remember notes by visualizing precisely where on their notebook page they wrote the information they seek.

Auditory learners remember best what they hear. They may have difficulty following written directions and may find reading and writing exhausting. They may do better by supplementing written notes with a tape of the lecture (with the instructor’s permission), summarizing on tape what they read, and participating actively in discussions.

Tactile learners tend to remember what they touch. They like hands-on learning, may have difficulty sitting still, and learn better through physical activity. They may do better in active settings such as lab work and role playing, or using a computer and taking frequent study breaks.

IN THIS CHAPTER, YOU WILL LEARN

- Preferences, psychological types, and learning styles
- What your own psychological type may be
- How to use all learning styles for success
- Study tips for your own psychological type/learning style
- What majors and careers suit your psychological type

Some people learn better by studying alone, and others prefer study groups. Although no one learning style is inherently better than another, you will need to adapt to the style required in a course.

Learning about Your Personality and Psychological Type

“Personality” is a general term referring to your characteristic ways of thinking, feeling, and behaving. “Psychological type” refers specifically to the personality theory of Carl Gustav Jung, the great 20th-century psychoanalyst. Because different psychological types approach their studies in different ways, we often say that they have different “learning styles.” Knowing your psychological type and corresponding learning style helps you identify strategies you are good at, and makes sure you don’t neglect necessary elements of learning that come less naturally to you. There are many different theories and tests of personality that describe different psychological types, but in this chapter we will be using the work of Jung, Myers, and Briggs.

The Myers Briggs Type Indicator, or MBTI[®], is the most widely used personality test designed for normal individuals, and it is given to several million people worldwide each year. Thousands of research studies have been carried out to support the validity of this test.

Note that all the psychological types we will describe are normal and healthy; there is no good or bad or right or wrong—people are simply different. Various strengths and weaknesses are commonly associated with each preference that makes up a psychological type.

Psychological Preferences

Your psychological type is the combination of your preferences on four different scales. These scales measure how you take in information and how you then make decisions or come to conclusions about that information. They also measure your orientation toward the outer and inner worlds. Like being left-handed or right-handed, these preferences are of an “either-or” nature. But like your hands, you actually use both possible preferences—it’s just that one is your natural favorite.

Each preference has a one-letter abbreviation. The four letters together make up your “type.” Now here are all the preferences and what they mean.

Extraversion (E) vs. Introversion (I): The Outer or Inner World

The E–I preference indicates whether you direct your energy and attention primarily toward the outer world of people, events, and things or the inner world of thoughts, feelings, and reflections.

Extraverts tend to be outgoing, gregarious, and talkative. They often “think with the volume on,” saying out loud what is going on in their minds. They are energized by people and activity, and they seek this in both work and play. They are people of action, preferring to spend more time doing things than thinking about them. At their best, they are good communicators who are quick to act and lead. At their worst, they talk too much and too loudly, they put their feet in their mouths, and they act before they think.

Introverts prefer to reflect carefully on things and think them through before taking action. They think a lot, but they tend to “think with the volume off”; if you want to know what’s on their minds, you may have to ask them. They are refreshed by quiet and privacy. At their best, introverts are good, careful listeners whose thoughts are deep and whose actions are well considered. At their worst, they may be too shy and not aware enough of the people and situations around them, and they may think about things so long that they neglect to actually start doing them.

Sensing (S) vs. Intuition (N): Facts or Ideas

The S–N preference indicates how you perceive the world and take in information: directly, through your five senses; or indirectly, using your intuition.

Sensing types are interested above all in the facts, what is known and what they can be sure of. Typically they are practical, factual, realistic, and down-to-earth. They can be very accurate, steady, precise, and patient and effective with routine and details. They are often relatively traditional and conventional. They dislike unnecessary complication, and they prefer to practice skills they already know. At their best, sensing types can be counted on to do things right and keep doing things right, with every detail well taken care of. At their worst, they can plod along while missing the point of why they are doing what they do, not seeing the forest (the whole picture) for the trees (the details).

Intuitive types are fascinated by possibilities: not so much the facts themselves, but what those facts mean, what concepts might describe those facts, how those might relate to other concepts, what the implications of the facts would be, and so on. Intuitive types are less tied to the here-and-now and tend to look further into the future and the past. They need inspiration and meaning for what they do, and they tend to work in bursts of energy and enthusiasm. Often they are original, creative, and nontraditional. They may have trouble with routine and details, however, and they would rather learn a new skill than keep practicing the one they have already mastered. They can be bad at facts and may exaggerate without realizing it. At their best, intuitive types are bright, innovative people who thrive in academic settings and the world of invention and ideas. At their worst, they can be impractical dreamers whose visions fall short because of inattention to practical detail.

Thinking (T) vs. Feeling (F): Logic or Values

The T–F preference indicates how you prefer to make your decisions: through logical, rational analysis or through your subjective values, likes, and dislikes.

Thinking types are usually logical, rational, analytical, and critical. They pride themselves on reasoning their way to the best possible decisions. They tend to decide things relatively impersonally and objectively, and they are less swayed by feelings and emotions—both their own and other people’s. Other people’s feelings sometimes puzzle or surprise them. They can deal with interpersonal disharmony and can be firm and assertive when they need to be. In all their dealings, they need and value fairness. At their best, thinking types are firm, fair, logical, and just. At their worst, they may be cold, insensitive to other people’s feelings, and overly blunt and hurtful in their criticisms.

Feeling types are typically warm, empathic, sympathetic, and interested in the happiness of others as well as themselves. They need and value harmony, and they may be distressed and distracted by argument and conflict. They sometimes have trouble being assertive when it would be appropriate to do so. Above all, they need and value kindness. At their best, feeling types are warm and affirming—they facilitate cooperation and goodwill among those around them while pursuing the best human values. At their worst, feeling types can be illogical, emotionally demanding, reluctant to tackle unpleasant tasks, and unswayed by objective reason and evidence.

Judging (J) vs. Perceiving (P): Organization or Adaptability

The J–P preference indicates how you characteristically approach the outside world: making decisions and judgments, or observing and perceiving instead.

Judging types approach the world in a planned, orderly, organized way; as much as possible, they try to order and control their part of it. They make their decisions relatively quickly and easily. They like to make and follow plans. They begin at the beginning, end at the end, and try to finish one thing before starting the next. They are usually punctual and tidy, and they appreciate those traits in others. At their best, judging types are natural organizers who get things done and done on time. At their worst, judging types may jump to conclusions prematurely and be too judgmental of people.

Perceiving types don’t try to control the world as much as adapt to it. Theirs is a flexible, wait-and-see approach. They deal comfortably and well with changes, unexpected developments, and emergencies, adjusting their plans and behaviors as needed. They tend to delay decisions so that they can keep their options open and gather more information. They may procrastinate to a serious degree, however, and they may try to carry on too many things at once, without finishing any of them. At their best, perceiving types are spon-

taneous, flexible individuals who roll with the punches and find ways to take the proverbial lemons in life and turn them into lemonade. At their worst, perceiving types may become messy, disorganized procrastinators who cannot be relied on.

Because there are two possible choices for each of four different preferences, there are sixteen possible psychological types. The four preferences that make up one of the sixteen types may interact in a unique way. You can read more about this in some of the references listed at the end of this chapter, but for simplicity we will deal mainly with the four main preference choices rather than the sixteen individual types.

Using Your Personality for Better Learning

The key to using psychological type to succeed in college is to use all the attitudes and functions (E, I, S, N, T, F, J, and P) effectively in a logical sequence. As you go about your studies, here is the system we recommend:

- 1. Sensing.** Get the facts. Use Sensing to find and learn the facts. What are the facts? How do we know them? What is the factual evidence for what is being said?
- 2. Intuition.** Get the ideas. Now use Intuition to consider what those facts mean. Why are those facts being presented? What concepts and ideas are being supported by those facts? What are the implications? What is the “big picture”?
- 3. Thinking.** Critically analyze. Use Thinking to analyze the pros and cons of what is being presented. Are there gaps in the evidence? What more do we need to know? Do the facts really support the conclusions? Are there alternative explanations? How well does what is presented hang together logically? How could our knowledge of it be improved?
- 4. Feeling.** Make informed value judgments. Why is this material important? What does it contribute to people’s good? Why might it be important to you personally? What is your personal opinion about it?
- 5. Introversion.** Think it through. Before you take any action, carefully go over in your mind everything you have encountered so far.
- 6. Judging.** Organize and plan. Don’t just dive in! Now is the time to organize and plan your studying so you will learn and remember everything you need to. Don’t just plan in your head, either; write your plan down, in detail.
- 7. Extraversion.** Take action. Now that you have a plan, act on it. Do whatever it takes. Create note cards, study outlines, study groups, and so on. If you are working on a paper instead of a test, now is the time to start writing.

8. Perceiving. Change your plan as needed. Be flexible enough to change your plan if it isn't working. Expect the unexpected and deal with the unforeseen. Don't give up the whole effort the minute your original plan stops working; figure out what's wrong. Then come up with another, better plan and start following that.

If you do all of these things in the proper order, you should be able to study successfully for any test from any teacher, and produce a solid and complete piece of work for any paper or assignment.

Your Instructors' Teaching Styles

Once you learn about psychological types, it may be fairly easy to make guesses about what your instructors' types are, and therefore what kind of questions and evaluation criteria they will use. This is risky, however, and not recommended, for two reasons: (1) you may guess wrong, and fail; and (2) many instructors make a conscious effort to "cover all the bases," and therefore test and evaluate in a variety of ways.

To illustrate the perils of studying in just one manner, consider this actual example. Two classes were assigned Henry David Thoreau's famous book *Walden*. All the students read the same book. One instructor gave a very Sensing test, asking only for facts such as the exact location of Walden Pond, the year the book was written, and so on. Students who studied with Sensing only did fine, but Intuitive-only students thought those questions were trivial, didn't study them, and never got a chance to discuss the ideas they had studied.

The other instructor gave a very Intuitive test. The entire test read: " 'I was determined to know beans.' Discuss." The Sensing-only students were stricken—they didn't even know what they were being asked! The Intuitive-only students did fine, happily giving long, abstract discussions of the implications of that quote from Thoreau's book.

Only the students who studied with both their Sensing and Intuition could have passed whichever test they happened to get. Moral of the story: Always cover all the psychological bases when you study.

Helpful Hints for Each Type

Much of the following advice might help any personality type, but because each type tends to have characteristic strengths and weaknesses, some suggestions are particularly apt for certain types.

Tips for Extraverts

1. Studying is your most important activity, so don't let your other activities take up all your study time. Also, don't try to multitask: you can't study effectively while you are simultaneously instant-messaging your buddies, visiting with your friends, eating a meal, watching TV, and so on.
2. Study in groups, put the material into words, and talk about it out loud; but prepare for group study sessions by working carefully with the material beforehand.
3. Participate in class by asking questions or making comments—but think these through before you say them out loud.
4. Get involved in as many class demonstrations, projects, lab exercises, field trips, interest groups, and other course-related activities as you can.

Tips for Introverts

1. Find a quiet, comfortable place where you can study on your own without being disturbed. Don't try to study in your room, unless yours is uncommonly quiet and free of interruptions.
2. Put what you are studying and want to remember into written words.
3. Don't be afraid to ask questions in class; if you have a question, others are probably wondering the same thing, and they will silently bless you for asking. Also feel free to go to your instructor's office hours and ask questions or make comments one-on-one.
4. Don't get "lost in space" with your own thoughts. Be sure to pay attention at all times to what is going on in class, and stay "on task" as you study.

Tips for Sensing Types

1. Some students give broad, sweeping generalizations without supporting facts—but you are more likely to give lots of facts without tying them together. When studying the facts, take time to consider why you are studying them, what concepts they illustrate, and why they are important.
2. Don't accept everything just as it is given to you; think about it, work with it, and make it your own.
3. Ask for more time to do your best on tests—it never hurts to ask. (The worst your instructor can do is say, "No, I'm sorry, I can't.") If you don't have enough time, do everything that is relatively quick and easy for you first, even if that means taking things out of order; then do as much as you can with as many things as possible that are left. Move fast and skip around.

4. Go beyond the obvious on test questions, and watch out for subtle traps. On papers and other assignments, go beyond the minimum; top grades usually go to students who do more than was required, but still stick to the point.

Tips for Intuitive Types

1. Always be able to cite facts, evidence, and examples. Don't skip over the details, whether in studying, writing papers, or taking tests. In math and science courses, show all your work.
2. Don't exaggerate or overstate your case; make sure what you're saying is accurate and well justified.
3. Follow instructions. Often, you may want to do things your own way, but get your instructor's approval to do so first. The safest bet is to do everything as instructed. Then, if you'd like to add something more creative afterwards, fine. Just explain to your instructor what you added and why.
4. Try to work on things steadily, not in fits and starts; find less important parts you can work on when you are not especially inspired. Realize that you may greatly underestimate how much time you will need to study or write papers, so as a rule of thumb, plan for at least twice as much time as you think you will need.

Tips for Thinking Types

1. College isn't always fair. Be prepared for that, and after a certain point, accept it.
2. Don't over-argue your points, just because you feel certain you are right. After a certain point, you can't simply "logic" people into submission. If it's not a major point, simply express yourself and then let it go.
3. Don't neglect the human side of things. People's likes and values do matter and must be taken into consideration.
4. Remember to praise as well as criticize.

Tips for Feeling Types

1. Don't expect special favors because you are a nice person. Your teachers fail lots of nice people every year. They don't enjoy doing it, but if you don't meet the same expectations as everyone else, you aren't going to pass the course.
2. Work as hard on things that you find disagreeable as you work on things you like. It's best to start with what you don't want to do, and then reward yourself by doing work that you like.

3. Stand up for yourself and your point of view, but learn to use and accept logical arguments.
4. Remember to constructively criticize as well as praise.

Tips for Judging Types

1. Avoid absolute statements, those with drastic and extreme opposites.
2. Keep an open mind. Get all the facts and considerations before you make up your mind, and don't jump to conclusions—about ideas or people—too quickly.
3. Don't be afraid to change your mind—that's a big part of what college is about.
4. Don't panic if your plans don't work; just change them and try again. It's not good to miss a deadline, but no student has ever been executed for it. Explain your situation to your instructor, and do the best you can.

Tips for Perceiving Types

1. Procrastination is your worst enemy! Beware of it and learn to defeat it. If you don't know where to start, start anywhere—just start.
2. Don't present all sides of something and then leave it hanging; come to conclusions, even if tentative.
3. Don't abandon all of your plans just because you fail to live up to some of them. You will get better at it. Just modify your plan, then continue to follow it.
4. Don't assume your teachers will cut you a break and accept things late. Poor planning on your part may not constitute an emergency on theirs; if they let everyone turn things in late, they couldn't do their jobs. If it's unavoidable that you'll be late, talk to your instructor beforehand and explain. Also remember that repeatedly coming to class late makes a poor impression and may lower your grade.

YOUR PERSONAL JOURNAL

Here are several things to write about. Choose one or more. Or choose another topic related to personality and learning styles.

1. As best you can determine, what is your true psychological type/learning style? What specific experiences and characteristics lead you to believe that this one is yours?

2. What sorts of learning style behaviors come most easily to you? Which are most difficult?
3. How sure are you about what major and career you want to choose? What strengths from your psychological type will help you in this, and what potential weaknesses will you have to address?
4. What behaviors are you willing to change after reading this chapter? How might you go about changing them?
5. What else is on your mind this week? If you wish to share it with your instructor, add it to this journal entry.

READINGS

Accommodating Students' Learning Styles*

Professors want their lessons to stimulate all of their students' senses. Here are some of the latest innovations that turn an ordinary classroom into a multimedia event.

By Amy Milshtein

While there are many types of learning styles, people are generally grouped into one of three sensory categories: auditory (prefer to learn by hearing), tactile (prefer to learn by doing) and visual (prefer to learn by seeing or writing). No single way is good or bad, or right or wrong. The styles simply reflect our individual brain wiring and the way we absorb and store information.

That doesn't mean, however, that each person is locked into one style that was assigned in the cradle and is taken to the grave. We may favor one sense, but we are not ruled by one. "We are not born with one specific learning style," explains Dr. Mike Atwood, professor at Philadelphia's Drexel University College of Information Science and Technology. "We process information using a mixture of cues."

In fact, a 1971 study called Silent Messages conducted by Professor Albert Mehrabian asks how people communicate. His research reveals: only 7 percent of communication comes from the actual dictionary meaning of what was said; 35 percent comes from verbal inflection; while a whopping 58 percent comes from visual cues like eye contact, gestures, and body language.

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What does this mean to the professor trying to reach all of those differently wired brains? “We have gotten away from the ‘sage on the stage’ model where the lecturer drones on and the students take notes,” says Atwood. “We’ve moved to a mode where students need to reach out and touch the material.”

What are some of the important technologies that have aided in this effort? They run the gamut from state-of-the-art to low-tech yet surprisingly innovative. Here are some of the learning tools showing up in campuses across the country.

CAN YOU HEAR ME NOW?

While no longer the sole star of the show, the professor is still the facilitator. But what good is it if that facilitator cannot be heard? “The spoken voice gets weary, and strain sets in,” explains Roscoe Anthony, vice president of marketing at Califone International, Inc., Chatsworth, Calif.

Since teachers are not trained to project to the back of the room like Celine Dion, products like Califone’s Classroom Amplification Systems allow even the most soft-spoken to get their points across. “Studies suggest that amplifying the voice increases student material retention,” says Anthony.

Systems range from simple boom boxes with microphones to more complex wireless headsets that allow teachers to move about the classroom effortlessly. When students break into groups, an amplified teacher can get everyone’s attention at once. When students don their own headsets to work in computer or music labs, a teacher can break in on the lesson and instruct further.

“As multimedia labs develop, this technology has grown more sophisticated,” Anthony interjects. “Don’t expect to see cassettes.” Instead, today’s auditory aids are MP3 and CD driven.

THE IDIOT BOX GROWS UP

“Television used to be called ‘the boob tube,’ ” says Bob Bauman, sales manager for Contemporary Research Corp. in Dallas. “Today it’s a highly regarded learning tool.”

Video applications have replaced such standard teaching tools as 16 mm films, filmstrips, and even overhead projections. Companies like Contemporary Research and VBrick Systems, Inc., Wallingford, Conn., offer the gamut from basic media retrieval systems to the bells and whistles of real-time, on-demand, DVD-quality video and CD-quality audio.

“A system like ours allows visual images from other locations to enter the classroom,” says Rich Mavrogeanes, president and founder of VBrick Systems. “For instance, if a professor is lecturing on dinosaurs, the class can instantly connect to and interact with a museum curator holding a bone.” For a visual learner, this beats any illustration in a book.

IT'S OKAY TO WRITE ON THE WALL

Even the old standard chalkboard has been polished up. “Whiteboards transform walls into a clean, bright, highly readable surface,” says Erica Weaver, marketing assistant for Walltalkers in Fairlawn, Ohio. She says that whiteboards and colored markers are easier to see and more stimulating than chalkboards.

Interactive and smart whiteboards take the concept even further. “I’ve heard that using interactive whiteboards improves collaboration, decreases teaching time, and actually increases attention,” explains Alfred Basilicato, president and CEO for Numonics Corp., Montgomeryville, Pa.

An interactive whiteboard uses a computer stylus instead of ink. The resulting writing can be saved, manipulated, and sent out to laptops instantly. This tool can also let teachers and students replay the entire lesson and even access the Internet.

“For auditory learners, it’s wonderful because they can just sit back and listen without having to take notes,” says Basilicato. “But it’s great for the tactile learner too. He or she can come up to the board, grab the pen, and start writing.”

All of these tools aim to help students learn in any style. But more important, they help them interact. Atwood stresses the importance of collaborative learning: “They need to be active participants in the process. Learning has become a collaborative effort. One in which technology is key.”

Texas Tech U.: Students Should Adapt Study Habits to Learning Styles*

By Lauren Clonts

Students who spend hours cramming the night before a test only to forget half of the material come test time are not uncommon. Not to worry, however; several approaches aid in remembering.

Ruth Maki, professor of psychology, said how well people learn and remember depends upon the way they learn the information.

“There are a number of things we know from the study of human memory that improve speed of learning and retention,” she said. “The main thing is levels of processing—when students read, hear, or study information, they need to be thinking about how things relate to each other and the meaning of

**The America's Intelligence Wire*, September 21, 2004. Copyright 2004 M2 Communications Ltd. Reprinted with permission.

things.” Maki said good strategies for learning include making visual images and tying information to things you already know. As opposed to just hearing or reading the surface of things, think about how they all relate, she said.

“Tie things to personal experiences and make diagrams instead of just reading about them,” Maki said. “Ask yourself questions about the material.” The key to remembering information is remembering things different ways, Maki said.

“The more ways you can get things into your memory, the better you will remember it,” she said.

Some students read a textbook ten times, but cannot recall the information, Maki said.

Reading things repeatedly is not effective, but making diagrams, taking good notes, and creating questions for yourself is a good approach, she said.

“Often students learn material very specifically, so if a test question is exactly how they learned it, they can pull it out [of memory],” she said. “But if a test question is different than the students learned it, they may not remember the information.” Nathan Harkey, a senior agricultural communications major from Petersburg, said he usually starts studying the night before a test.

“I can never find time,” he said. “I know I should study a lot more, but if I can get by, I’d rather do that.” Harkey said his method of studying is to read the notes from class and any handouts professors give.

“If there is a lot of information or anything with formulas, I’ll make flashcards,” he said.

Maki said when students just memorize information, they will not remember the information if the test question is not exactly as they read it.

Students must think of information in different ways and aspects, she said. “Link information together, and you will be able to retrieve it better,” Maki said. The best method to remember material for the long term is to study it not all at once, but to study it now, then next week and the next week and so on, she said.

“If you spread studying out over time, you will remember it much longer,” Maki said.

If someone remembers facts for a long enough period of time, it will become ingrained in their mind, she said. “Information that is learned over long periods of time basically becomes unforgettable,” she said.

Robin Hilsabeck, assistant professor of neuropsychiatry and behavioral science at Texas Tech Health Sciences Center, said students usually discover their own learning techniques before coming to college.

“Students have different strengths and weaknesses,” she said. “Some are visual learners, some have to write things down, and some have to do it to learn it.” Hilsabeck said the personality of a student often determines his/her learning strategies. Some students have to write material down fifteen different ways, and some have to only write it down once, she said.

“Mnemonic techniques, such as acronyms, help students remember the information by encoding it better,” she said. “They process it more deeply.” A lot of research shows the context in which people learn information helps them remember it better, Hilsabeck said.

“If you are used to drinking coffee while you study, you should drink coffee before taking a test,” she said. “Figure out what learning techniques work for you, and stick with those.”

DISCUSSION

1. Discuss how what you’ve learned about your psychological type and your learning style may affect your choice of a major and a career. Discuss this with other students.
2. Think of some examples of how your learning style preferences may or may not explain why you select certain kinds of people as friends—or why you would prefer certain types to be your supervisor or teacher. Compare your observations with those of some students in this class.
3. What is the connection between your learning style preferences and the fact that you seem to learn more from some instructors than others? As a group, share some coping skills to use with teachers whose teaching styles aren’t the best fit with your learning style preferences.
4. The first reading, “Accommodating Students’ Learning Styles,” offers strategies for creating a more stimulating classroom learning environment. Discuss which of these suggestions you think would be appropriate to suggest to one or more of your professors in a course evaluation and explain why you would learn better under these recommended conditions.
5. In the second reading, the author states: “Some students read a textbook 10 times, but cannot recall the information.” Talk about this in a small group and find out how many in the group are facing this problem. Then come up with a number of ideas for overcoming it.