

CHAPTER 1

THE 7
LEARNING STYLES:
WHAT ARE THEY?

ONE

Different Learning Styles in Education

Different people learn differently, and psychologists have attempted through the years to spell out the traits of different types of learners and categorize them into different “learning styles.”

Background History

Accounting for individual learning styles is not a new idea. As early as 334 BC, Aristotle said that “each child possessed specific talents and skills” and he noticed individual differences in young children.

In the early 1900's, several personality theories and classifications for individual differences were advanced; these focused especially on the relationship between memory and visual or oral instructional methods. The research in learning styles then declined due to the emphasis on the student's IQ and academic achievement.

In the last half of the 1900's, however, there has been a renewed interest in learning styles research and many educators are attempting to apply the results within the classroom.

Definition of Learning Styles

You have probably noticed that when you try to learn something new you prefer to learn by listening to someone talk to you about the information. Or perhaps you prefer to read about a concept to learn it, or maybe see a demonstration.

Learning styles can be defined, classified, and identified in many different way. Generally, they are overall patterns that provide direction to learning and teaching. Learning style can also be described as a set of factors, behaviors, and attitudes that facilitate learning for an individual in a given situation.

Styles influence how students learn, how teachers teach, and how the two interact. Each person is born with certain tendencies toward particular styles, but these biological or inherited characteristics are influenced by culture, personal experiences, maturity level, and development. Style can be considered a "contextual" variable or construct because what the learner brings to the learning experience is as much a part of the context as are the important features of the experience itself.

Each learner has distinct and consistent preferred ways of perception, organization and retention. These learning styles are characteristic cognitive, affective, and physiological behaviors that serve as pretty good indicators of how learners perceive, interact with, and respond to the learning environment.

Students learn differently from each other and it has been determined that brain structure influences language structure acquisition. It has also been shown that different hemispheres of the brain contain different perception avenues. Some researchers claim that several types of cells present in some brains are not present in others.

LET'S EXPLORE!

Visual Learning Style

People with a visual learning style absorb information by seeing it in front of them and storing the images in their brains. They often enjoy reading, have good handwriting, are very detail-oriented, are organized, and have a keen awareness of colors and shapes.

They tend to struggle with verbal directions and are easily distracted by noise. They remember people's faces better than their names, and they often need to maintain eye contact with a person to concentrate on a conversation.

Here are some tips for helping visual learners excel in the classroom:

- Write out directions.
- Use visuals when teaching lessons, such as pictures, charts, diagrams, maps, and outlines.
- Physically demonstrate tasks.
- Use visual aids such as flashcards and blocks.
- Show the visual patterns in language to teach spelling, vocabulary, grammar, and punctuation.
- Organize information using color codes.
- Talk with the child face-to-face and make eye contact whenever possible.

- When directions are given verbally, encourage the child to ask for clarification when she doesn't understand fully.
- Encourage the child to write plenty of notes and organize information on paper and with objects.
- Provide a quiet, neat place to study, and minimize distractions as much as possible.

Auditory Learning Style

Verbal language is the prime form for exchanging information for those within the auditory learning style. They learn best by hearing and speaking. They often talk more than the average person, are very social, enjoy hearing stories and jokes, understand concepts by talking about them, and may excel in music or the performing arts.

Some auditory learners read slowly and have trouble writing, struggle to follow written directions, and have a tough time staying quiet for long stretches of time. They remember names and recognize tone of voice well, while not always remembering people's faces. They often hum or sing, and they may whisper to themselves while reading.

Try these techniques when teaching auditory learners:

- Play word games and use rhymes to practice language.
- Have the child read aloud, even when alone, and follow the text with her finger.

- Allow the child to explain concepts verbally and give oral reports.
- Have the child memorize information by repeating it aloud.
- Assign projects and study times to be done in small and large groups.
- Read aloud often to young children.
- Provide a personal voice recorder the child can use to record notes or questions.
- Use beats, rhythms, and songs to reinforce educational information.

Kinesthetic Learning Style

People with the kinesthetic learning style learn best by doing: moving around and handling physical objects. They like to explore the outdoors, are often very coordinated, may excel in athletics and performing arts, and usually express their feelings physically, such as with hugging and hitting. They prefer trying new skills for themselves rather than being given directions or shown a demonstration.

They may find it hard to sit still for long periods of time and struggle with reading and spelling. They are often considered “difficult” and misdiagnosed with ADHD (attention deficit hyperactivity disorder). In recent years, more educators have accepted that they simply learn differently and have urged educators to consider more kinesthetic learning activities.

These teaching tips can help you get the most out of kinesthetic learners:

- Give breaks frequently.
- Let the child try something first before you give detailed instructions.
- Provide plenty of hands-on learning tools, such as crayons, blocks, puzzles, maps, modeling clay, science experiments, an abacus, and a geoboard (a square board with pegs used to teach shapes and geometric concepts).
- Don't limit the study space to the usual desk. Allow the child to study while moving around, lying on the floor, or slouching in a couch.
- Use the outdoors for learning opportunities.
- Teach educational concepts through games and projects.
- Assign presentations in which children demonstrate concepts or skills.
- Encourage physical movement while studying. For example, quiz the child while taking a walk around the block.
- Find a school with mandatory physical education. Kinesthetic learners suffer most from the recent cutting of P.E. in many schools.

Read/Write Learning Style

The read/write learning style was added to Fleming's model after the initial three. Read/write learners

specifically learn best through the written word. They absorb information by reading books and handouts, taking lots of notes (sometimes word-for-word), and making lists. They prefer lectures, diagrams, pictures, charts, and scientific concepts to be explained using written language. They are often fast readers and skillful writers.

Similar to visual learners, read/write learners may struggle with verbal directions and are easily distracted by noise. Some may be quiet and struggle to detect body language and other social cues.

Here are some ways to help read/write learners succeed:

- Encourage the child to write plenty of notes, rewrite them in her own words, and study from them.
- Provide thorough, well-organized written material, and write key points in full sentences on the board during lectures.
- Assign plenty of writing exercises.
- Explain diagrams, graphs, or any mathematical data using language.
- Set up a quiet study area with as few distractions as possible.
- Provide a dictionary, thesaurus, and other resource material.
- Allow the child to answer multiple-choice questions.

The Complexities of Learning Styles

Many other models for learning styles exist, most notably David Kolb's Experiential Learning Model and Learning Style Inventory, which are used to categorize adults more so than children.

Whichever model of learning styles is used, psychologists agree that almost no one falls neatly into only one learning style. People may be categorized into one, but their various traits can apply to others—or they may have a secondary learning style that works for them significantly better than another. For example, a student may be primarily a visual learner, have some skills for auditory learning, and have no skill for learning kinesthetically.

Additionally, some psychologists have proposed that all children are primarily kinesthetic learners until second or third grade, only developing other learning styles when their education becomes more rigorous.

Modality:

VISUAL LEARNERS (INPUT)

Descriptors:

- Learn by observation
- Can recall what they have seen
- Can follow written or drawn instructions
- Like to read
- Use written notes
- Benefit by visualizing, watching TV/video/films

Learn Best Through the Use of:

- Charts, graphs, diagrams, and flow charts
- Sight words
- Flashcards
- Visual similarities and differences
- Pictures and graphics
- Maps
- Silent reading
- Written instructions
- Computer assisted learning

Modality:

AUDITORY LEARNERS (INPUT)

VERBAL-LINGUISTIC

INTELLIGENCE

Descriptors:

- Prefer listening and taking notes
- Listen for patterns
- Consult peers to ascertain that they have the correct details
- Can recall what they have heard
- Can follow oral directions
- Repeat words aloud for memorization
- Use oral language effectively

Learn Best Through the Use of:

- Discussion, dialog, debate
- Memorization
- Phonics
- Oral reading
- Hearing anecdotes or stories
- Listening to tapes or CDs
- Cooperative learning groups

Modality:

KINESTHETIC LEARNERS (INPUT)

Descriptors:

- Are often physically adept
- Learn through experience and physical activity
- Benefit from demonstration
- Learn from teaching others what they know

Learn Best Through the Use of:

- Playing games
- Role playing
- Read body language/gestures
- Mime
- Drama
- Learn or memorize while moving (*pacing, stationary bike, finger or whole body games*)

Modality:

TACTILE LEARNERS (INPUT)

Descriptors:

- Learn by touching and manipulating objects
- Often learn inductively rather than deductively
- Tend toward psychomotor over abstract thinking
- Prefer personal connections to topics
- Follow directions they have written themselves / that they have rehearsed
- Benefit from demonstrations

Learn Best Through the Use of:

- Learning by doing
- "Hands-on"
- Creating maps
- Building models
- Art projects
- Using manipulatives
- Drawing, designing things
- Writing / tracing

Modality:

ACTIVE

Descriptors:

- Can be impulsive
- Risk-takers
- Do not prefer lectures
- Prefer group work
- Tend to be interpersonal
- Not inclined to too much note-taking

Learn Best Through the Use of:

- Prefer “doing, discussin, explaining” vs listening and watching
- Prefer active experimentation
- Like acting and role playing
- Like team competition

Modality:

REFLECTIVE

Descriptors:

- Prefer to think about concepts quietly before any action
- Learn by thinking
- Like writing
- Tend to be intrapersonal and introspective

Learn Best Through the Use of:

- Tend toward deductive learning
- Prefer reflective observation
- Intrapersonal skills valued
- Journals
- Learning logs

Modality:

GLOBAL UNDERSTANDING

Descriptors:

- Make decisions based on intuition
- Spontaneous and creative; “idea” person
- Often a risk-taker
- Tend to reach conclusions quickly
- Intake information in large chunks rather than details
- Nonlinear thinkers
- “See the forest before they see the trees.”

Learn Best Through the Use of:

- Interpersonal connection important to them
- Stories and anecdotes
- Seeing the “whole” rather than in parts
- Highly interesting project and materials
- Functional games and activities
- Think-pair-share; Praise-question-polish
- Teacher feedback; person-to-person communication

Modality:

ANALYTICAL UNDERSTANDING

Descriptors:

- Sequential, linear learners
- Prefer information in small chunks, steps
- Can follow the rules for mathematic equations
- Prefer a logical progression
- “See the trees before they see the forest.”

Learn Best Through the Use of:

- Intrapersonal skills valued
- Journals
- Learning logs
- Sequentially organized material, timelines, diagrams
- Moving from “part” to the “whole”
- Puzzles, logic games

Learning Preferences

Field Dependent Definition:

[field sensitive] - tends toward concrete: more teacher and group interaction

Field Independent Definition:

tends toward abstract

Field Dependent Learner

- Experiences in a global fashion, adheres to structures
- Learns material with social content best
- Attends best to material relevant to own experience
- Requires externally defined goals and reinforcements
- Needs organization provided
- More affected by criticism
- Uses observational approach for concept attainment [learns best by using examples]

Field Dependent Teaching Styles

- Prefers teaching situations that allow interaction and discussion with students
- Uses questions to check on student learning following instruction
- Uses student-centered activities
- Viewed by students as teaching facts
- Provides less feedback, positive feedback

- Strong in establishing a warm and personal learning environment

Field Independent Learners

- Perceives analytically
- Makes specific concept distinctions; little overlap
- Impersonal orientation
- May need explicit training in social skills
- Interested in new concepts for their own sake
- Has self-defined goals and reinforcement
- Can self-structure situations
- Less affected by criticism
- Uses hypothesis-testing approach to attain concepts

Field Independent Teaching Styles

- Prefers engaging students by establishing routines in order to work through ideas
- Uses questions to introduce topics and probe student answers
- Uses teacher-organized learning situations
- Viewed by students as encouraging to apply principles
- Gives corrective feedback using error analysis
- Strong in organizing and guiding student learning