Learning Styles: Dunn and Dunn Model

www.learningstyles.net

Rita and Kenneth Dunn define Learning Styles as, "The way in which each learner begins to concentrate, process and retain new and difficult information. That interaction occurs differently for everyone." When a student's natural tendency and style is triggered, his/her ability to concentrate and make associations improves his chances of transferring information to long-term memory. The Dunn and Dunn Model is a comprehensive model that identifies each individual's strengths and preferences across the full spectrum of five categories. These five categories have been identified in determining how we learn:

- Environmental
- Emotional
- Sociological
- Physical
- Psychological

Environmental
Sound either present or absent
Light
Temperature
Design (formal or informal seating)

Emotional
Motivation
Persistence
Responsibility/Conformity
Structure

Sociological
Study/Learn Alone
Paired with another
Study/Learn with a group
Colleagues
Authority
Vary the way one Studies

Physical
Perceptual Strengths (Auditory, Visual, Tactile, Kinesthetic)
Intake
Time of Day
Mobility

Psychological
Analytical or Global
Left brain or Right brain
Reflective or Impulsive

Noise Level (Quiet or Sound)
Some people need quiet when they are learning, while others notify neither noise or movement once they begin to concentrate; they can "block out" sound.

Quiet
* Provide quiet or use earphone to muffle noise.
* Allow student to move to a quiet area.

Sound
* Provide soft noise nature sound machines.
* Music without lyrics such as Classical or Baroque
* Permit headphones/IPOD

Light (Low or Bright)
Some people work best under very bright light; whereas, others need indirect or low lights (LSI Manual).

Low
* Use low lighting or natural lighting.
* Use lamps with dimmer switches

Bright
* Provide extra illumination-lamps, remove window treatments
* Use full-spectrum lights to simulate natural light when not available.

Temperature (Cool or Warm)
Many students cannot "think" when they feel hot, and other cannot "think" when they feel cold; some concentrate better in either a warm or cool environment (LSI manual by Dunn and Dunn).

Cool
* Keep room temperature cool
* Allow students to move to a cooler area, if possible
* Use fans

Warm
* Keep room temperature cool
* Encourage students to bring sweaters or jackets
* Allow students to move to a warm area of the room
* Use a space heater, if possible

Design (Informal or Formal)

Informal

Permit students to study on the floor, couch, beanbag chair or a comfortable chair.

Formal

* Provide a straight back chair and a hard surface for books and papers.
* Sit at a desk or a table

Motivation

Self-motivation is the desire to achieve academically, to please oneself (LSI Manual).

Motivated

* Allow self-designed objectives, procedures, and evaluations.
* Allow self-pacing and rapid achievement

Unmotivated

* Design short, uncomplicated assignments/tasks
* Monitor frequently
* Use short-range motivators
* Provide sincere, positive, immediate feedback at frequent intervals
* Provide several, easily understood options based on individual interests
* Encourage peer relationships with able, motivated students
* Solicit self-developed goals and procedures and track progress
* Introduce material through perceptual strengths-reinforce material through secondary strengths
* Examine time of day, perceptual strengths, and sociological preferences and try to utilize strengths
* Use interest inventories to identify motivators

Persistent

This element involves a person's inclination either to complete tasks that are begun or to take occasional "breaks" and return to assignments or learning activities later (LSI manual).

Low

* Provide short term assignments/tasks and/or assistance with "breaking down" long term tasks
* Check progress frequently
* Provide options based on individual interests
* Experiment with short ranged motivators/reinforcements
* Encourage peer relationships with persistent students
* Praise during the process of completing tasks as well as upon completion
* Encourage self-design of short assignments
* Permit "periodic" breaks

Responsible

This element involves students desire to do what they think they ought to do. In schools, responsibility is often related to conformity or following through on what a teacher asks students to do. Students with low responsibility scores usually are nonconforming; they do not like to do something because someone asks them to do so.

Low (non conforming)

* Design short term limited assignments with only single or dual goals
* Provide options/give choices
* Check work frequently
* Give simple directions
* Base tasks/assignments on interests
* Use praise/reward
* Encourage personal choices related directly to tasks
* Explain "why' assignments are important
* Speak to students as an equal

High (conforming)

* Design short-term assignments and gradually increase length/scope as he successfully completes task
* Challenge individual at his functional ability or slightly above that level.

Structure (Wants or Does Not Want)

This element involves a student's preference for specific directions or explanations prior to undertaking or completing an assignment versus the student's preference for doing an assignment his way/her way (LSI Manual).

Does Not Want

* Establish clearly stated objectives, but permit choices of resources, procedures, timelines, reporting, and checking
* Permit choices of environmental, sociological, and/or physical elements
* Provide creative options/opportunities to grow and to stretch talents and abilities.
* Review work at regular intervals, but permit latitude for completion if progress evident

Wants

* Be precise about every aspect of each assignment
* Permit no options unless individual is also highly motivated
* Use clearly stated objectives in a simple form
* List/itemize as many things as possible
* Leave nothing for interpretation
* Indicate specific tasks, time management, and the resources that may be used
*Establish specific learning/reporting patterns and criteria as each task is completed
* Periodically check progress

Alone/Peers (Prefers Alone/Prefers Peers)
Some individuals prefer to study by themselves while others prefer to learn with a friend or colleague; in the latter situation, discussion and interaction facilitate learning. Sometimes students prefer to study alone but in close proximity to others. The factor analysis does not differentiate among those individuals who want to learn with just one other person or with several individuals.

Prefers Alone
*Allow student to work alone

Prefers Peers
*Allow students to work with a peer or group
* Check periodically to make sure that the students are on task

Authority Figures (Does not want present/wants present)
Some people feel better or more comfortable when someone with authority or recognized special knowledge is present (LSI Manual).

Does not want
*Allow student to work without supervision

Wants present
* Provide frequent interaction and direction.

Several Ways (Does not learn in/Prefers variety)
This element has alternate meanings. It suggests that the person may learn easily alone and also with other people present (with peers, with an authority, or in any combination) or that the person needs variety as opposed to routines.

Does not learn in
*Provide routines

Prefers variety
* Provide opportunities to learn alone, with peers and with authority

Auditory, Visual, Tactile and Kinesthetic is covered in separate handouts.

Intake (Does not prefer/prefers)
This area describes those students who often eat, drink, chew or bite objects while concentration as opposed to those who prefer no intake until after they have finished studying.

Does not prefer
*Do not provide snacks until after the lesson

Prefers
* Allow nutritious snacks at workstation or desk

Time of Day
These are two of the four "time-of-day preferences."
Evening and Morning are on a continuum; if a score falls below 40 the student tens to be an evening person; if the score is above 60, the student most prefers to learn in the early morning.

Prefers evening/prefers morning

Prefers evening
* Introduce new material in the afternoon
* Give tests in the afternoon
* Advise students to study in the evening after 6 p.m.

Prefers morning
* Introduce new material in the morning
* Give tests in the morning
* Advise students to study in the morning

Late Morning (Does not prefer/prefers)
The energy curve for these students is highest in the late morning (around 10 a.m.) and they prefer to learn during the late morning (LSI).

Does not prefer
* Late morning is not the highest energy curve for these students

Prefers
* Introduce new material in the late morning
* Give tests in the late morning

Afternoon (Does not prefer/prefers)
The energy curve for these students is highest in the afternoon and they prefer to learn during the afternoon.

Prefers
*Introduce new material in the afternoon * Give tests in the afternoon

Mobility (Does not prefer/prefers)
How still can the person sit and for how long? Some people need frequent "breaks" and must move about the instructional environment. Others can sit for hours while engaged in learning particularly if they are interested in the task (LSI manual).

Prefers
* Allow students to take frequent physical breaks while learning
* Stretch
* Walk

Parent Motivated (Low/High)
The desire to please parents or parent figures. They often complete tasks because a family member will be proud of their accomplishment (LSI Manual).

Low
*Identify other motivators

High
*Communicate regularly with parents or parent figure.

Teacher Motivated (Low/High)
Individuals who want to learn and complete assignments because their teachers will be pleased with their efforts.

Low
*Identify other motivators

High
*Praise frequently and sincerely