Learning Styles: One Piece of the PUZZLE

To Optimal Learning
Approaches To LEARNING STYLES
Necessary for Optimal Learning

Sensory Modes  *Input*

Hemispheric Dominance  *Process*

Multiple Intelligence  *Response*
On line  http://www.mtsu.edu/~chopper/jensen.html
Bibliography


Intelligence

The ability to generate new problems to solve.
Intelligence

The ability to respond successfully to a new situation and the capacity to learn from one’s past experiences.
Intelligence

The ability to make or offer a service that is valued within one’s culture.
Intelligence

The ability to solve problems that one encounters in real life.
IQ tests usually judge who the successful students will be *in school* but seldom measure how successful they will be in the *real world.*
Too much focus on verbal and logical thinking in assessing intelligence—neglect other ways of knowing.

Gardner
Begin to learn something NEW or DIFFICULT in your Strength.
Reinforce it in as many ways possible.
Linguistic Intelligence
Words- Word Smart

Who? journalist, storyteller, poet, lawyer

Abilities? argue, persuade, entertain or instruct effectively through spoken word

Characteristics? like word games, tongue twisters, puns, trivia experts, retain facts, read voraciously, write clearly and gain meaning from written word
Logical-mathematical

Numbers and Logic  Logic Smart

Who? Scientists, accountant, computer programmer

Abilities? reason, sequence, think in terms of cause and effect

Characteristics? create hypotheses, look for conceptual regularities or numerical patterns, enjoy a generally rational outlook on life
Visual-Spatial Intelligence

*Pictures and Images* Picture Smart

**Who?** architects, photographers, artists, pilots, mechanical engineers

**Abilities?** perceive, transform, and recreate different aspects of the visual-spatial world.

**Characteristics?** acute sensitivity to visual details, can visualize vividly, draw or sketch their ideas graphically, and orient themselves in 3-dimensional space with ease
Musical Intelligence

Rhythms and Melodies Music Smart

Who? singers, instrumentalists, and composers

Abilities? perceive, appreciate and produce rhythms and melodies

Characteristics? has a good ear, can sing in tune, keep time to music, and listen to different musical selections with some degree of discernment
Bodily Kinesthetic

*Physical* Body Smart

**Who?** athletes, craftspeople, mechanics, surgeons

**Abilities?** controlling one’s body movements and handling objects skillfully—hands-on people who have good tactile sensitivity, need to move their bodies frequently and get “gut” reactions to things

**Characteristics?** can be athletic or skilled in sewing, carpentry or model building or enjoy pursuits like hiking, dancing, jogging, camping, swimming or boating
Interpersonal

Works with and understands other people

People Smart

**Who?** administrator of large corporation, social workers, teachers, negotiators

**Abilities?** perceive and be responsive to moods, temperaments, intentions, and desires or others

**Characteristics?** can be compassionate and socially responsible or manipulative and cunning
Intrapersonal

Inner self  Self Smart

Who? counselors, theologians and self employed business people

Abilities? can be introspective and enjoy meditation, contemplation or other forms or soul searching

Characteristics? fiercely independent, highly goal-directed, and intensely self-disciplined---prefer to work on their own rather than with others
Naturalist
observing, understanding, and organizing patterns in the natural environment
Category Smart

Who? biologist, botanist, chefs

Abilities? discriminate among living things and sensitivity to features of natural worlds.

Characteristics? can recognize and classify plants, minerals, and animals. Skills of observing, collecting and categorizing can extend to the “human” environment as well.
You possess all eight intelligences:

- linguistic
- logical-mathematical
- spatial
- musical
- bodily kinesthetic
- interpersonal
- intrapersonal
- naturalist
Makes us UNIQUE Individuals

May strongly identify with one or two
But we have all eight
Combination of strengths and weaknesses makes us unique
Why the theory of Multiple Intelligence?

Room for everyone to shine
Incorporates broad spectrum of human abilities
Presents eight different ways to learn
In Order to be considered an intelligence category it must:

• be capable of being symbolized—a way to depict experience through representation
• have its own developmental history
• be biologically based
• culturally valued
Symbolized

linguistic
logical
spatial
musical
kinesthetic
interpersonal-social
intrapersonal-self

letters--words
numbers
pictures-geo figures
notes--clef signs
body language
shaking hands-waving
dream images
Each intelligence uses a separate cognitive process for

MEMORY (remember melodies different from faces)

ATTENTION (details of pictures and body language)

PERCEPTION (pitch and verbal sounds)

PROBLEM SOLVING (math problems and personal problems)
Is there a test?

Identify the intelligences being used in the following activities. Consider ALL that may be used.
Linguistic, Logical-mathematical, Spatial, Musical, Bodily-kinesthetic, Interpersonal, Intrapersonal, Naturalist

1. Singing in the choir at church.
2. Working a jigsaw puzzle.
3. Working a crossword puzzle.
4. Solving "who done it" in a mystery.
5. Giving advice to people at work.
6. Writing poetry.
7. Knowing the words to many popular songs.
8. Enjoying having time for yourself
9. Humming a jingle you've heard on TV.
10. Doodling while talking on the phone or taking notes.
11. Computing numbers in your head.
12. Reading for pleasure as often as possible.
13. Playing a sport.
15. Framing a house.
16. Writing an essay.
17. Keeping a personal journal or diary.
18. Taking photographs.
19. Meditating.
20. Arguing.
21. Appreciating the color and balance of a picture.
22. Creating mnemonics.
23. Rearranging a room.
24. Categorizing objects
25. Perceiving the moods of others.
27. Keeping rhythm to a song.
28. Studying in a group.
29. Using concept maps, graphs, or pictures to learn.
30. Organizing collections.
31. Finding a rational explanation for an occurrence.
32. Having trouble sitting still.
33. Noticing changes in the environment.
34. Showing someone how to do something.
35. Visiting with friends.
36. Spending a weekend alone.
If for a biology test you needed to learn the seven major taxonomic categories, or taxa, used in classification:

- kingdom
- phylum
- class
- order
- family
- genus
- species

You might use each of the intelligences to learn them.

You would want to begin with your strongest.
Begin to learn something **NEW** or **DIFFICULT** in your **Strength**.
Reinforce it in as many ways possible.
Linguistic

King Phillip Came Over For Good Spaghetti.
Kyle’s Putting Chowder on the Four Giant Spiders.
Karen Preston Came Over From the Gulf States.
Kevin Put Corn On the Forrest Green Spinach.
Kathy Pretended Connor was From Germany and Spain.
Intrapersonal

You as a human being belong to the following categories:

Animal Kingdom
Phylum of **Chordates**
Class of **mammals**
Order of **primates**
Genus of **Homo**
Species of **Homo Sapiens**
Spatial
Musical

Can you think of a tune?

1. kingdom
2. phylum
3. class
4. order
5. family
6. genus
7. species
You possess all eight Intelligences

linguistic
logical-mathematical
spatial
musical
bodily kinesthetic
interpersonal
intrapersonal
naturalist
Begin to learn something *NEW* or *DIFFICULT* in your Strength.
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Sensory Modes

Visual
Auditory
Kinesthetic

Input preference
Hemispheric Dominance

Left Brain

Right Brain

Process Preference
Multiple Intelligence

linguistic
logical-mathematical
spatial
musical
bodily kinesthetic
interpersonal
intrapersonal
Naturalist

Response Preference