Learning Styles: One Piece of the PUZZLE To Optimal Learning
LEARNING STYLES

WHY BOTHER?
Learning something in new and difficult in the way your brain prefers it

Saves you time.
The information becomes *personal knowledge* quicker.
Learning about learning styles reminds you of other options for making connections.
It is an Important Piece in Learning “How to Learn”
Learners need a sense of control over their learning.

When a learner *feels in control*, the cortex is fully functional and higher level meaningful learning is possible

- creativity, analysis, synthesis, planning, and problem solving

When a learner *feels he is not in control*, these parts of the brain *shut down* and the only learning possible is rote memorization or simple learning based on habit or instinct.

Caine and Caine (1991)
When students

are required to think critically. . .
know what questions to ask. . .
know strategies for processing information. . .
know the goal or objective of a lesson. . .
know how they learn best . . .

Control shifts from instructor to LEARNER
Remember Jensen's
Equation for Optimal Learning

Meaning
(connecting experience, data and stimuli to form conclusions and create patterns that give our lives meaning)

Present Circumstances
(environment, feelings, people, context, goals, moods)

Personal History
(beliefs, experiences, values, knowledge)
The next three deal with learning style preferences

**Input (5 senses)**
- (visual, auditory, kinesthetic, olfactory, or gustatory)

**Processing (learning preference)**
- (states, left/right hemisphere, abstract or concrete)

**Responses (7 intelligences)**
- (verbal-linguistic, spatial, bodily kinesthetic, musical-rhythmic, mathematical-logical, intrapersonal, interpersonal)
On line  http://www.mtsu.edu/~chopper/jensen.html
Approaches To
LEARNING STYLES
Necessary for Optimal Learning

Sensory Modes  Input
Processing Preference  Process
Multiple Intelligence  Response
Begin to learn something **NEW** or **DIFFICULT** in your **Strength**.
Reinforce it in as many ways possible.
Sensory Modes

Input

Preference in Receiving Information
SENSORY MODES

AUDITORY
SENSORY MODES

VISUAL
SENSORY MODES

KINESTHETIC
Mixed Modality

Most of us use a combination of these three.
A fire breaks out in a room
Your **IMMEDIATE, FIRST** reaction

**Auditory**-- start yelling “Fire” or giving directions or screaming.

**Visual** -- quickly you size up the situation, looking for exits, others in need, etc.

**Kinesthetic**-- start running for the exits or grabbing others to help them out.

While you may do all 3, one will be an instinctual first reaction.

That's your sensory learning style.
We actually have five senses

We could include

Olfactory (smell)

and

Gustatory (taste)

- But visual, auditory and kinesthetic are used most for *semantic* memory
Use their voices and their ears as the primary mode of learning. You remember what you hear and what you say yourself. You want to talk about something difficult. You love class discussion.

listen carefully in class

tape record--both classes and notes for review and practice tests

discuss material with another student or instructor
Visual

Want to actually see the words written down, a picture of something being described, a time line to remember events in history, or the assignment written on the board. Probably you organize your materials. You appreciate being able to follow with an overhead transparency or handout.

Review and study material by reading and organizing--maybe even recopying.

Using mapping techniques

And mental videos
Kinesthetic

Prefer and actually learn better when they touch and are physically involved in what they are studying. Act out a situation, do a project and in general be busy with your learning. You may take lots of notes and never re-read them!

**Make copious notes**
**Use computer**
**Use Label in Margin System**
**Make flashcards**
**Mapping**
**Make summary sheets**
**Take sample tests**
**Pace/Dance/Cheer**
**Make models**
Begin to learn something NEW or DIFFICULT in your Strength.
Reinforce *it* *in as many ways possible.*
People Generally Remember

10% of what they **read**

20% of what they **hear**

30% of what they **see**

50% of what they **hear** and **see**

70% of what they **say** or **write**

90% of what they **say as they do a thing**

95% of what they **teach Someone else**

**Levels of Abstraction**

**Verbal receiving**

Read

**Hear Words**

Watch Still Picture

Watch moving picture

Watch exhibit

Watch demonstration

**Visual receiving**

Do a site visit

Do a dramatic presentation

Simulate a real experience

Do the real thing

Teach someone else

DALE’S CONE OF EXPERIENCE 1969
Processing Preference

Sometimes referred to as hemispheric dominance

[Link to on-line inventory]
One Brain-Two Sides

**Right** and **Left** Work Together for Most Activity
But, Process Information in Very **Different** Ways
Most People Have a Dominant Side
When Something is **New**, **Difficult** or **Unfamiliar**, we
Automatically Go to Dominant Side

**No one Is Totally Left or Totally Right Brained**
You **Can** and **Must** Develop Both Sides of the Brain
Most **ACADEMIC** information is geared to the left side of the brain.

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Amzanig huh?
Textbook Strategies
Global Learners

To get **WHOLE** picture
- Survey **first**
- Read **questions** at end
- Read **summary** at end
- Finally **read**
Sequence/Animals

Lion
Turtle
Eagle
Donkey
Shark
Butterfly
Rabbit
Elephant
Cat
Particularly *SPELLING*

huamn mnid deos not raed
ervey lteter by istlef, but
the wrod as a wlohe

**Despite this phenomena,**
**SEQUENCE IS NECESSARY!**
Analytic

Logical

Verbal

Global

Intuitive

Non-verbal
Analytic

Reality Based

Temporal

Fantasy Oriented

Non-Temporal
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Let’s Use the
Right Side of the Brain
ABCDEFGHIJKLMNOPQRSTUVWXYZ
I LOVE PARIS IN THE SPRINGTIME