

UNDERSTANDING TEACHING & LEARNING STYLES



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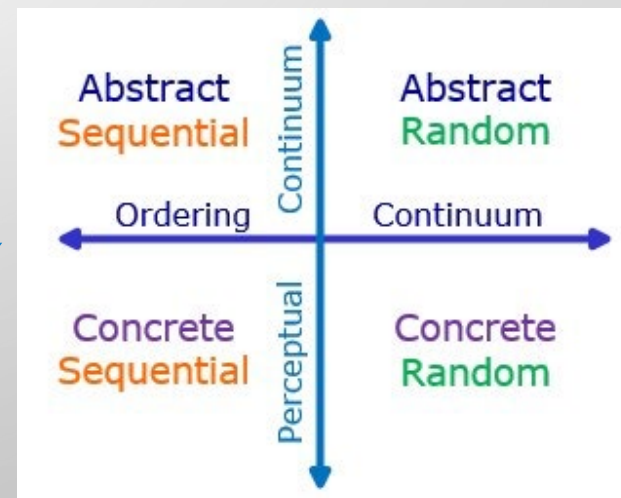
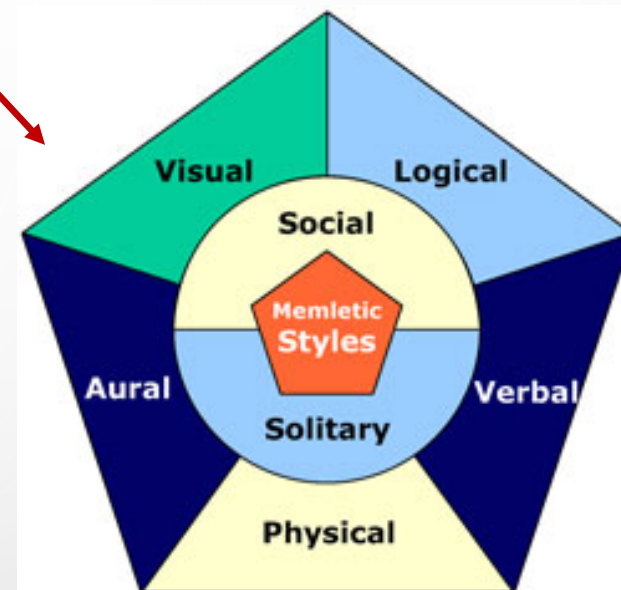


DIFFERENT STYLES OF LEARNING (INPUT) & THINKING (STORAGE)

Holy Spirit & Culture
Where do they fit in?

HOW TO UNDERSTAND

HOW TO TEACH



Parts of the Human Brain

Motor Function
Problem Solving

Integration
of 5 senses

frontal lobe

parietal lobe

Vision
Processing

occipital lobe

Auditory
Processing

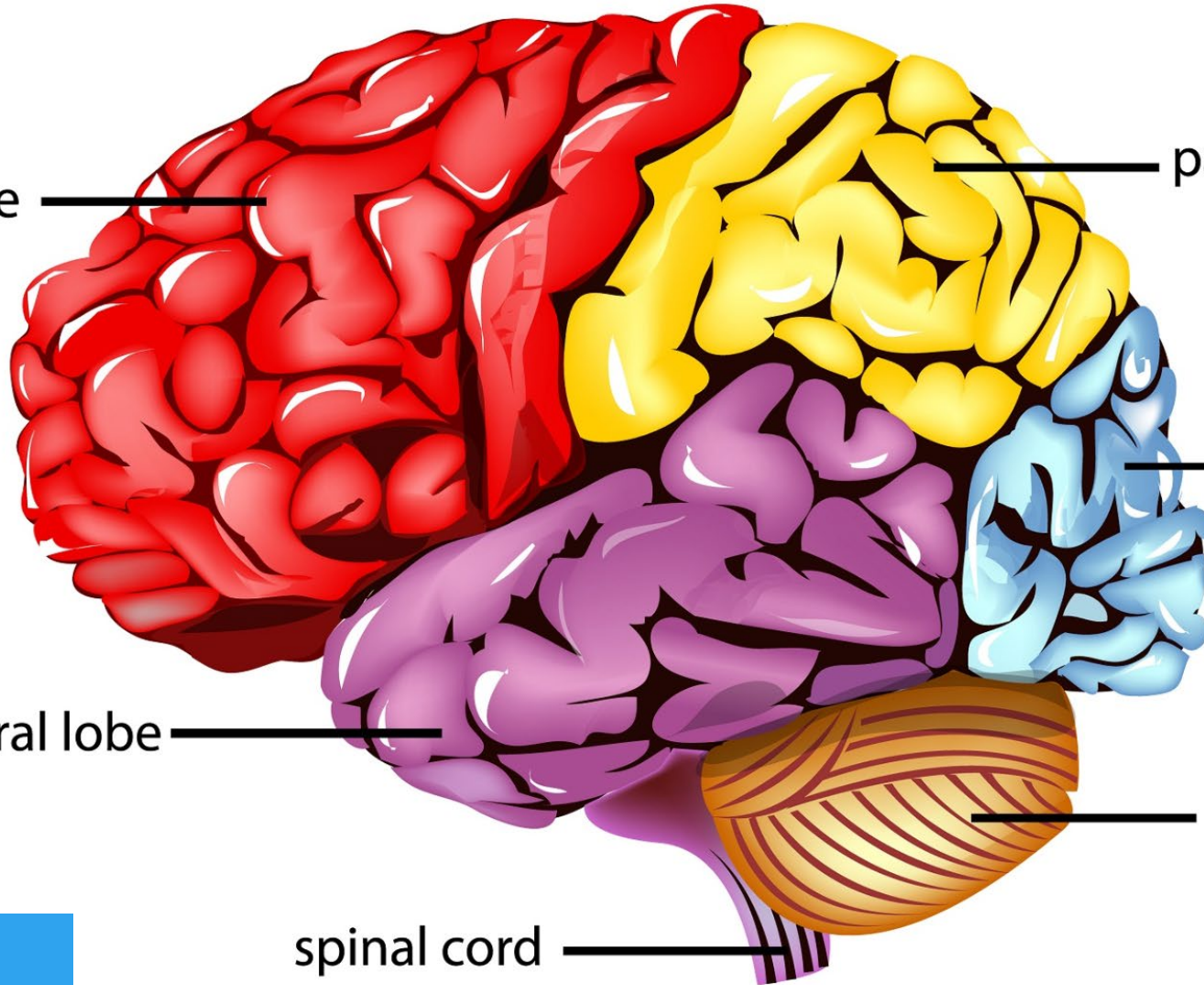
temporal lobe

Receives Information and
regulates motor functions

cerebellum

spinal cord

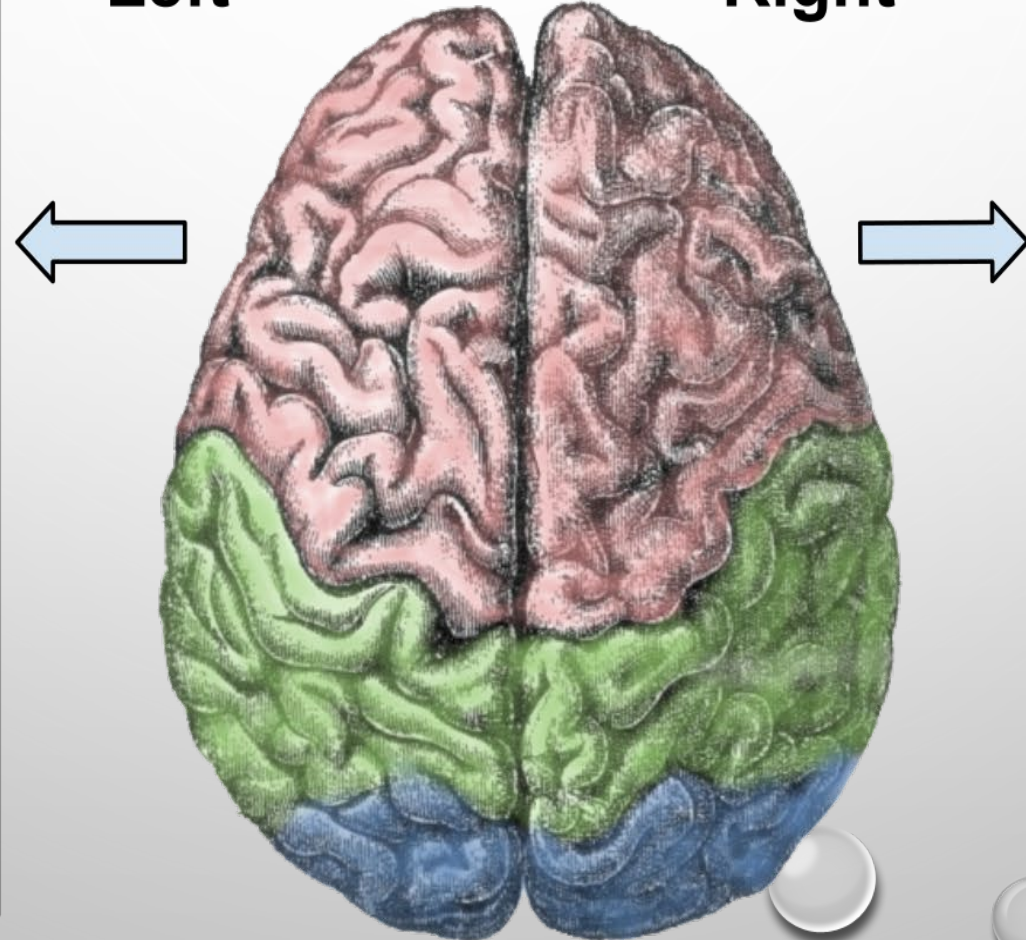
Input



Brain Lateralization

Left

Right

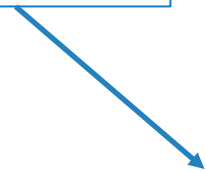


- Analytical thought
- Detail Oriented Perception
- Ordered Sequencing
- Rational Thought
- Verbal
- Cautious
- Planning
- Math/Science
- Logic
- Right Field Vision
- Right Side Motor Skills

- Intuitive Thought,
- Holistic perception
- Random Sequencing
- Emotional Thought
- Non-verbal
- Adventurous
- Impulse
- Creative Writing/Art
- Imagination
- Left Field Vision
- Left Side Motor Skills

The Learning Pyramid

Interpretation



Lecture 5%

Reading 10%

Audio Visual 20%

Demonstration 30%

Discussion Group 50%

Practice By Doing 75%

Teaching Others 90%

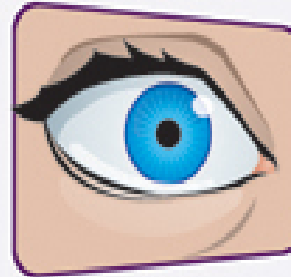
Average
Learning
Retention
Rates

Adapted from NTL Institute for Applied Behavioral Science

THE SIMPLE METHOD

WHY I USE THE SIMPLE METHOD FOR SERMONS AND POWERPOINTS?

- THE VISUAL LEARNER - SEES
- THE AUDITORY LEARNER – HEARS (AURAL)
- THE KINESTHETIC LEARNER - FEELS THE STORIES (PHYSICAL)



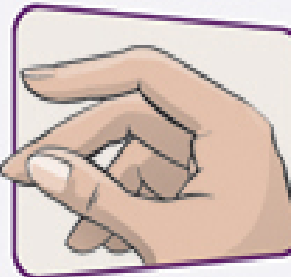
Visual Learner:

Learns best by seeing



Auditory Learner:

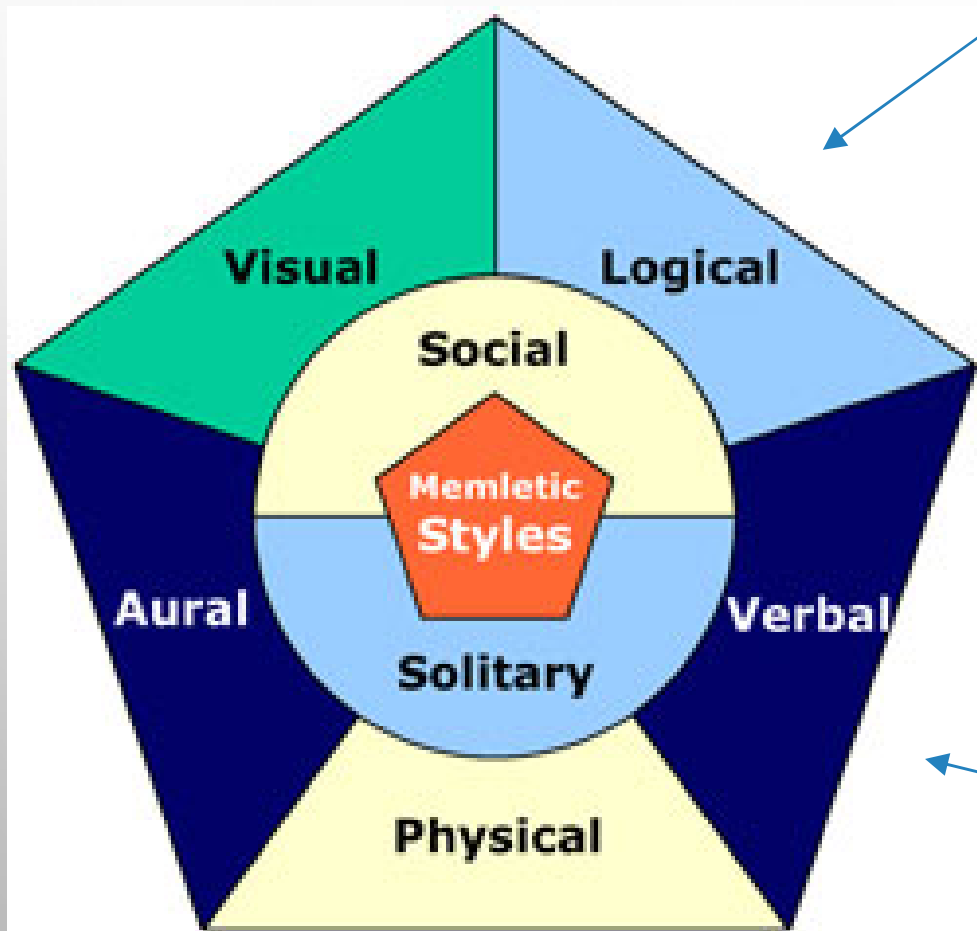
Learns best by hearing



Kinesthetic Learner:

Learns best by feeling or experiencing

THE ADVANCED METHOD



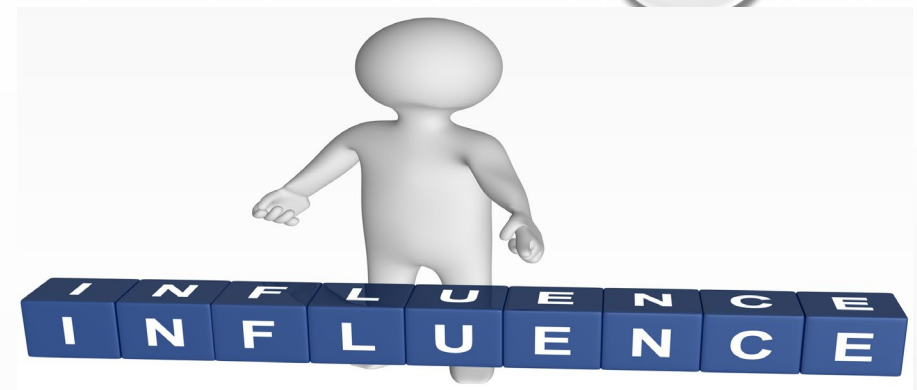
NOTICE

WHAT 4 AREAS ARE ADDED
TO THE SIMPLE METHOD?

HOW DOES THE ADDITIONS
HELP UNDERSTAND
LEARNING STYLES?



THE BASIS OF LEARNING STYLES



- YOUR LEARNING STYLES HAVE MORE INFLUENCE THAN YOU MAY REALIZE. YOUR PREFERRED STYLES GUIDE THE WAY YOU LEARN.
- THEY ALSO CHANGE THE WAY YOU INTERNALLY REPRESENT EXPERIENCES, THE WAY YOU RECALL INFORMATION, AND EVEN THE WORDS YOU CHOOSE.





THE BASIS OF LEARNING STYLES










- RESEARCH SHOWS US THAT EACH LEARNING STYLE USES DIFFERENT PARTS OF THE BRAIN. BY INVOLVING MORE OF THE BRAIN DURING LEARNING, WE REMEMBER MORE OF WHAT WE LEARN. RESEARCHERS USING BRAIN-IMAGING TECHNOLOGIES HAVE BEEN ABLE TO FIND OUT THE KEY AREAS OF THE BRAIN RESPONSIBLE FOR EACH LEARNING STYLE.



Learning Styles

FROM A
CHILD'S
PRESPECTIVE

<p><u>Visual</u></p>  <p>* You prefer using pictures, images, and spatial understanding.</p>	<p><u>Musical/Auditory</u></p>  <p>* You prefer using sound and music.</p>	<p><u>Verbal</u></p>  <p>* You prefer using words, both in speech and writing.</p>	<p><u>Physical/Kinesthetic</u></p>  <p>* You prefer using your body, hands and sense of touch.</p>
<p><u>Logical/Mathematical</u></p>  <p>* You prefer using logic, reasoning and systems.</p>	<p><u>Social</u></p>  <p>* You prefer to learn in groups or with other people.</p>	<p><u>Solitary</u></p>  <p>* You prefer to work alone and use self-study.</p>	<p>What is your learning style?</p>

VISUAL (SPATIAL) BREAKDOWN

THE OCCIPITAL LOBES AT THE BACK OF THE BRAIN MANAGE THE VISUAL SENSE. BOTH THE OCCIPITAL AND PARIETAL LOBES MANAGE SPATIAL ORIENTATION.

A RIGHT-BRAINED LEARNER IS TYPICALLY GOOD AT DECIPHERING VISUAL DATA IN THE FORM OF MAPS AND GRAPHS. WHILE THEY EXCEL AT SUBJECTS SUCH AS GEOMETRY, THEY STRUGGLE WITH ARITHMETIC AND NUMBERS IN GENERAL.



VISUAL (SPATIAL) BREAKDOWN



INCORRECTLY LABELLED AS “LATE BLOOMERS” FOR
THEIR STRUGGLES WITH READING AND WRITING, THESE
LEARNERS SIMPLY SEE THE WORLD IN A DIFFERENT MANNER.

THEY ARE IMAGINATIVE, THINK OUTSIDE OF THE BOX AND
QUICKLY PROCESS WHAT THEY SEE RATHER THAN WHAT
THEY HEAR.



PLANNING FOR **VISUAL (SPATICAL)** PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-





AURAL (AUDITORY/MUSIC) BREAKDOWN

THE TEMPORAL LOBES HANDLE AURAL CONTENT. THE RIGHT TEMPORAL LOBE IS ESPECIALLY IMPORTANT FOR MUSIC.

THINKS IN SOUNDS RATHER THAN IMAGES. THEY THINK CHRONOLOGICALLY AND LEARN BEST THROUGH STEP-BY-STEP METHODS.

UNLIKE VISUAL LEARNERS, THEY HAVE AN IMPECCABLE MEMORY FOR CONVERSATIONS AND ENJOY DEBATES AND DISCUSSIONS. THEY HAVE STRONG LANGUAGE SKILLS AND PERFORM WELL ON ORAL EXAMS.



AURAL (AUDITORY/MUSIC) BREAKDOWN

AS THE NAME SUGGESTS, THEY ALSO HAVE MUSICAL TALENTS AND ARE ABLE TO DISCERN INDIVIDUAL NOTES, RHYTHMS AND TONES. ON THE DOWNSIDE, THEY HAVE DIFFICULTY INTERPRETING FACIAL EXPRESSIONS AND GESTURES, AS WELL AS COMPLEX GRAPHS AND CHARTS.



PLANNING FOR **AURAL (AUDITORY/MUSIC)** PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-



VERBAL (LINGUISTICS) BREAKDOWN



THE TEMPORAL AND FRONTAL LOBES, ESPECIALLY TWO SPECIALIZED AREAS CALLED BROCA'S AND WERNICKE'S AREAS (IN THE LEFT HEMISPHERE OF THESE TWO LOBES).

VERBAL LEARNERS ARE ADEPT AT PROCESSING
INFORMATION THROUGH THE USE OF LANGUAGE. THEY
EXCEL AT READING, WRITING, LISTENING AND SPEAKING.



VERBAL (LINGUISTICS) BREAKDOWN

THEY HAVE AN EXCELLENT MEMORY FOR THINGS THEY HAVE READ AND ENJOY ALL TYPES OF WORD GAMES, PUNS, RHYMES AND TONGUE TWISTERS.

MANY OF THEM ALSO ENJOY LEARNING DIFFERENT LANGUAGES. THESE LEARNERS PARTICULARLY ENJOY THEIR WRITING, DRAMA AND SPEECH CLASSES.



PLANNING FOR **VERBAL (LINGUISTICS)** PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-





PHYSICAL (KINESTHETIC) BREAKDOWN

THE CEREBELLUM AND THE MOTOR CORTEX (AT THE BACK OF THE FRONTAL LOBE) HANDLE MUCH OF OUR PHYSICAL MOVEMENT.

ARE ALWAYS MOVING AND DOING SOMETHING WITH THEIR HANDS. THEY LEARN BEST WHEN THEIR BODIES ARE INVOLVED IN THE LEARNING PROCESS. THIS CAN MEAN ANYTHING FROM CREATING ARTWORK WITH THEIR HANDS TO BEING ABLE TO MANIPULATE WHAT IS BEING LEARNED.



PHYSICAL (KINESTHETIC) BREAKDOWN

THESE TYPES OF LEARNERS' BENEFIT FROM LARGES SPACES THAT ENABLE TO THEM TO DRAW AND WRITE. THEY CAN ALSO FIND WALKING BACK AND FORTH WHILE READING CONDUCIVE TO THEIR LEARNING.

IT COMES TO NO SURPRISE THAT PHYSICAL LEARNERS ARE MANY TIMES ATHLETICALLY GIFTED AND TEND TO LIVE IN THE PRESENT MOMENT RATHER THAN IN THE FUTURE OR THE PAST.



PLANNING FOR **PHYSICAL (KINESTHETIC)** PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-





LOGICAL (MATHEMATICAL) BREAKDOWN

THE PARIETAL LOBES, ESPECIALLY THE LEFT SIDE, DRIVE OUR LOGICAL THINKING.

THIS TYPE OF LEARNER IS SKILLED AT MATHEMATICAL AND LOGICAL REASONING. THEY ARE ABLE TO SOLVE PROBLEMS INVOLVING NUMBERS AND CAN EASILY DECIPHER ABSTRACT VISUAL INFORMATION.



LOGICAL (MATHEMATICAL) BREAKDOWN

THEY ARE ALSO ADEPT AT ANALYZING CAUSE AND EFFECT RELATIONSHIPS AND TEND TO THINK LINEARLY. THEY LIKE TO CLASSIFY AND GROUP INFORMATION, AS WELL AS CREATE ORDERED LISTS, AGENDAS AND ITINERARIES. THEY ARE ABLE TO PERFORM RELATIVELY COMPLEX CALCULATIONS IN THEIR HEADS AND ENJOY STRATEGY GAMES SUCH AS CHESS AND BACKGAMMON.



PLANNING FOR **LOGICAL (MATHEMATICAL)** PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-





SOCIAL (INTERPERSONAL) BREAKDOWN

THE FRONTAL AND TEMPORAL LOBES HANDLE MUCH OF OUR SOCIAL ACTIVITIES. THE LIMBIC SYSTEM (NOT SHOWN APART FROM THE HIPPOCAMPUS) ALSO INFLUENCES BOTH THE SOCIAL AND SOLITARY STYLES. THE LIMBIC SYSTEM HAS A LOT TO DO WITH EMOTIONS, MOODS AND AGGRESSION.



SOCIAL (INTERPERSONAL) BREAKDOWN

SOCIAL LEARNERS ARE GIFTED AT READING OTHERS' EMOTIONS AND FACIAL EXPRESSIONS, AS WELL AS RELATIONSHIP DYNAMICS.

THEY ARE ALSO VERY GOOD AT IDENTIFYING THE ROOT CAUSE OF COMMUNICATION PROBLEMS.





PLANNING FOR **SOCIAL (INTERPERSONAL)** PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-





SOLITARY (INTRAPERSONAL) BREAKDOWN


THE FRONTAL AND PARIETAL LOBES, AND THE LIMBIC SYSTEM, ARE ALSO ACTIVE WITH THIS STYLE.

LIKES TO USE SELF-STUDY AND WORK ALONE. USUALLY, SOLITARY LEARNERS ARE IN TUNE WITH THEIR FEELINGS, WHO THEY ARE AND WHAT THEY ARE CAPABLE OF DOING.



SOLITARY (INTRAPERSONAL) BREAKDOWN

THESE TYPES OF LEARNERS ARE VERY INDEPENDENT, SO THEY GUIDE THEMSELVES ON THEIR JOURNEY TO LEARNING SOMETHING NEW EACH DAY. THEY ARE PARTICULARLY GIFTED IN THE AREAS OF SELF-MANAGEMENT AND SELF-REFLECTION.



PLANNING FOR **SOLITARY (INTRAPERSONAL)** PEOPLE

PLEASE GIVE EXAMPLES

1-

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3-

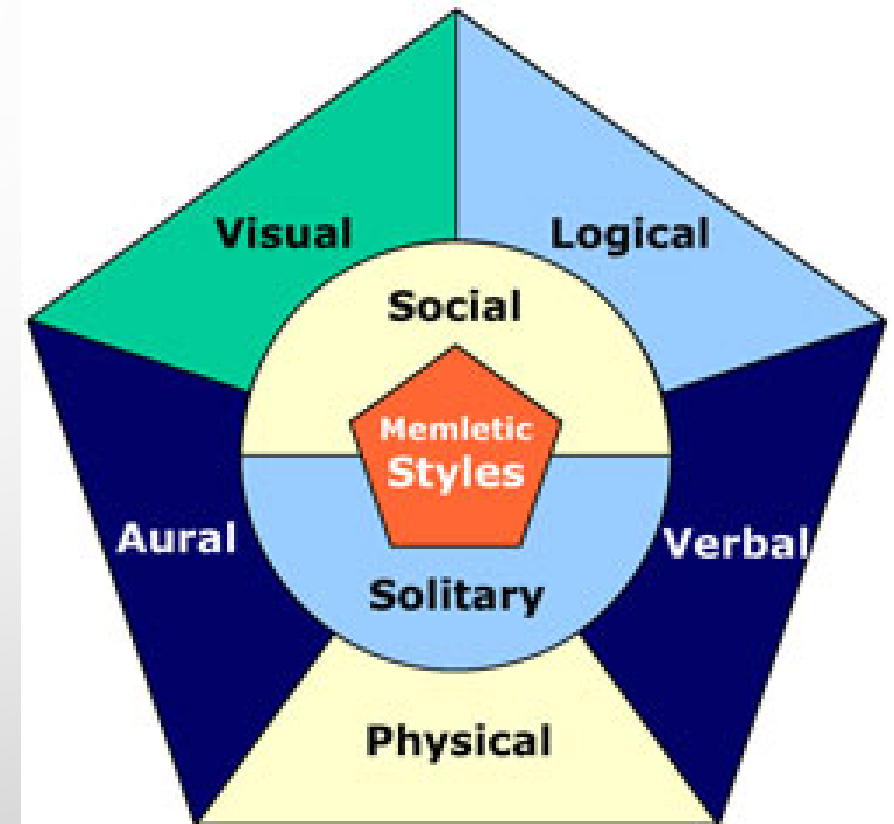
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5-



FORMAT - 90 MINUTES

- FALL IN (VERBAL – VISUAL – AURAL)
- GAMES (SOCIAL - PHYSICAL)
- HONOR / CLASS WORK (LOGIC +)
- WORSHIP – ONE VERSE (SOLITARY)
- FALL OUT – PRAYER (ALL)



Learning Styles

Recap

VERBAL

Words are your strongpoint!
You prefer to use words both
in speech and in writing!

VISUAL

You prefer to use pictures,
diagrams, images and spatial
understanding to help you
learn

MUSICAL / AUDITORY

You prefer using sounds or
music or even rhythms to
help you learn.

PHYSICAL / KINAESTHETIC

You use your hands, body
and sense of touch to help
you learn. You might 'act
things out'.

WHAT'S YOUR LEARNING STYLE?

LOGICAL / MATHEMATICAL

Learning is easier for you if
you use logic, reasoning,
systems and sequences.

SOCIAL

You like to learn new things
as a part of a group.
Explaining your
understanding to a group
helps you to learn.

SOLITARY

You like to work alone. You
use self-study and prefer your
own company when
learning.

COMBINATION

Your learning style is a
combination of two or more
of these styles.

Test

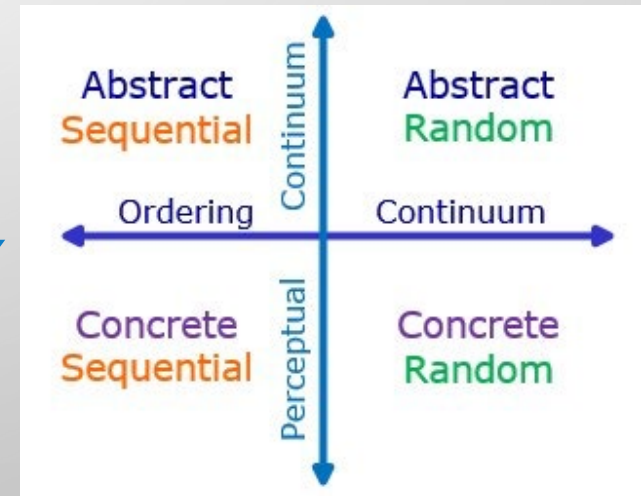
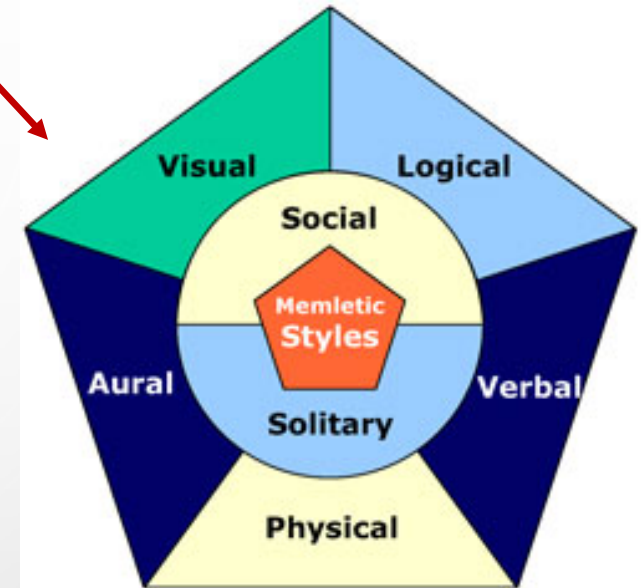
The word "Test" is rendered in large, bold, red 3D block letters. It is surrounded by several smaller green 3D numbers, including 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0, which are scattered around the word. The entire scene is set against a white background with soft shadows.

DIFFERENT STYLES OF LEARNING (INPUT) & THINKING (STORAGE)

Holy Spirit & Culture
Where do they fit in?

HOW TO UNDERSTAND

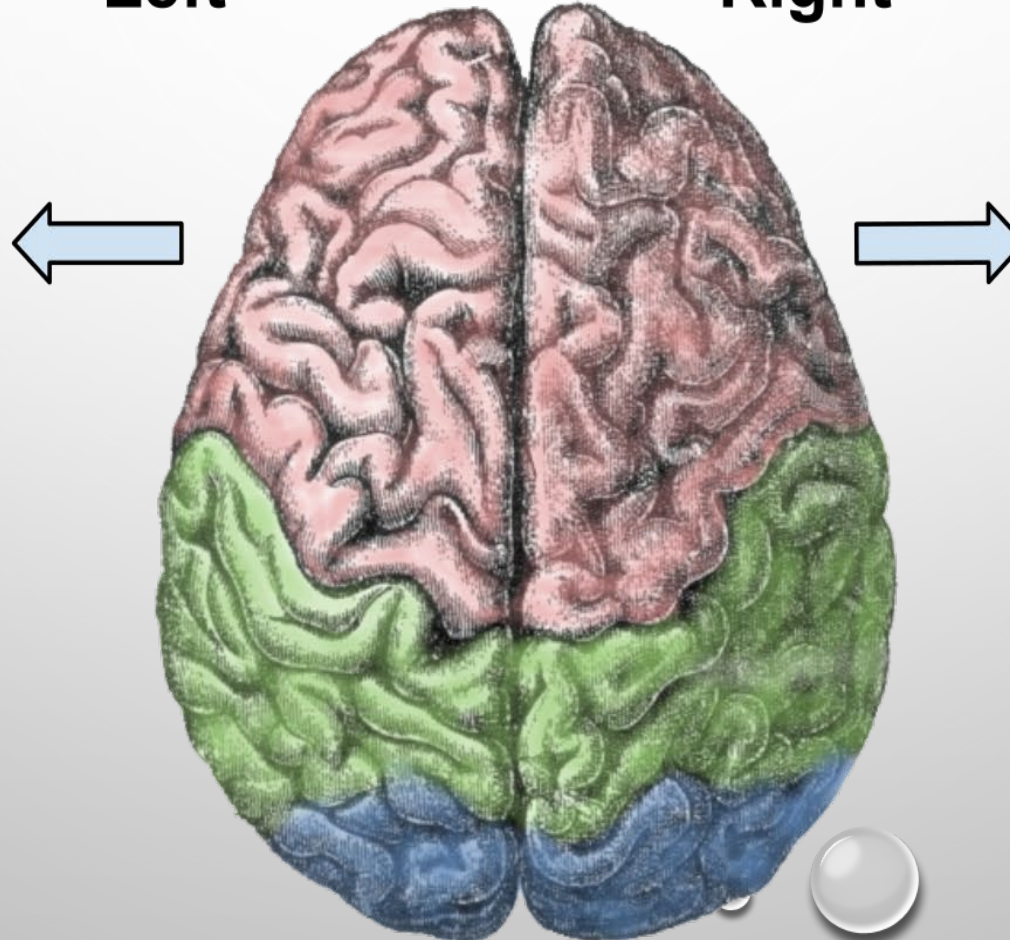
HOW TO TEACH



Brain Lateralization

Left

Right



- Analytical thought
- Detail Oriented Perception
- Ordered Sequencing
- Rational Thought
- Verbal
- Cautious
- Planning
- Math/Science
- Logic
- Right Field Vision
- Right Side Motor Skills

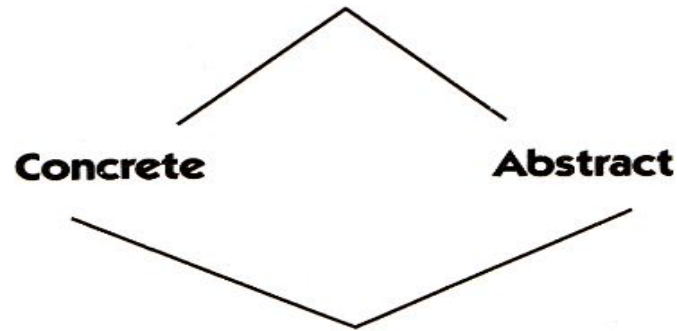
- Intuitive Thought,
- Holistic perception
- Random Sequencing
- Emotional Thought
- Non-verbal
- Adventurous
- Impulse
- Creative Writing/Art
- Imagination
- Left Field Vision
- Left Side Motor Skills

Learning Styles

The way in which we view the world is called our . . .

Perception

We perceive in two ways . . .



The way we use the information we perceive is called . . .

Ordering

We order in two ways . . .



Storage

CONCRETE (LEFT BRAIN)

YOU'RE DEALING WITH THE
HERE AND NOW AND
PROCESSING INFORMATION
BASED ON WHAT YOU SEE,
HEAR, THINK, FEEL, AND
TASTE. "IT IS WHAT IT IS." YOU
WANT A REAL EXAMPLE.



ABSTRACT (RIGHT BRAIN)

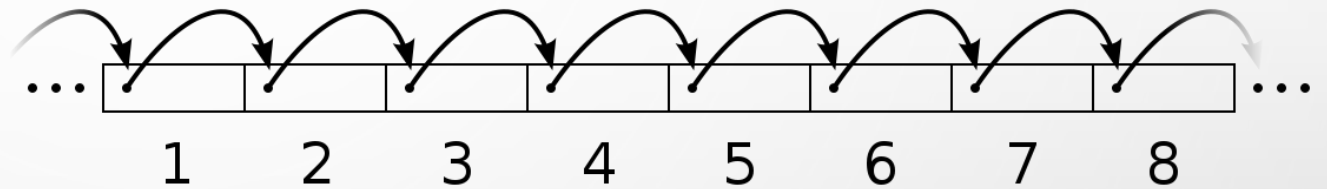
LOOKING FOR THE
PATTERNS. YOU'RE MORE
CEREBRAL IN YOUR
ANALYSIS. YOU'RE USING
YOUR INTUITION AND
IMAGINATION. "THINGS AREN'T
ALWAYS WHAT THEY APPEAR
TO BE." YOU ABSTRACT FROM
THE EXAMPLES.



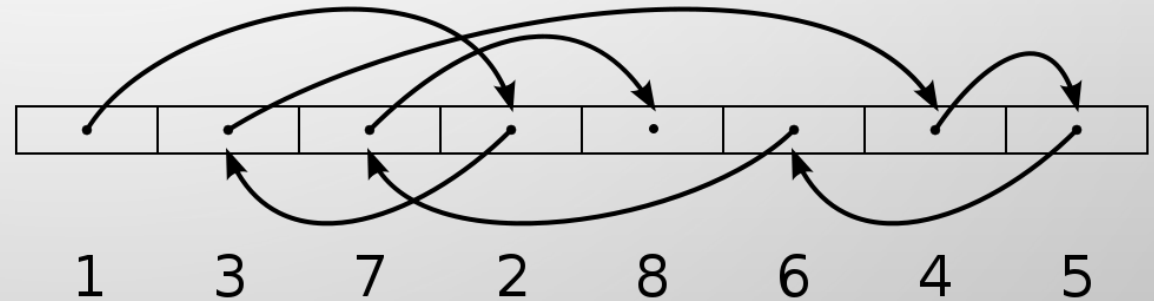
RANDOM (RIGHT BRAIN)

YOU'RE PROCESSING
CHUNKS OF
INFORMATION IN A
RANDOM WAY. YOU
CAN HOP AROUND WITH
EASE.

Sequential access



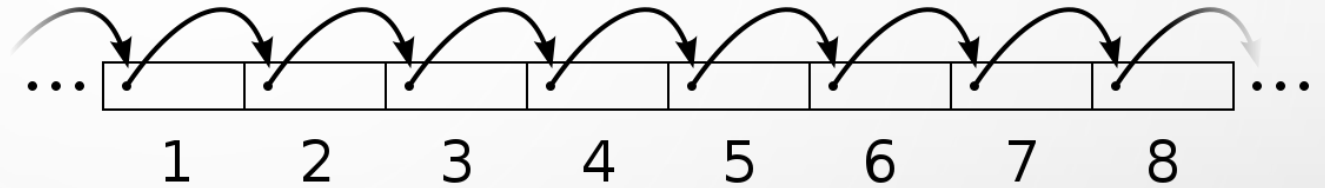
Random access



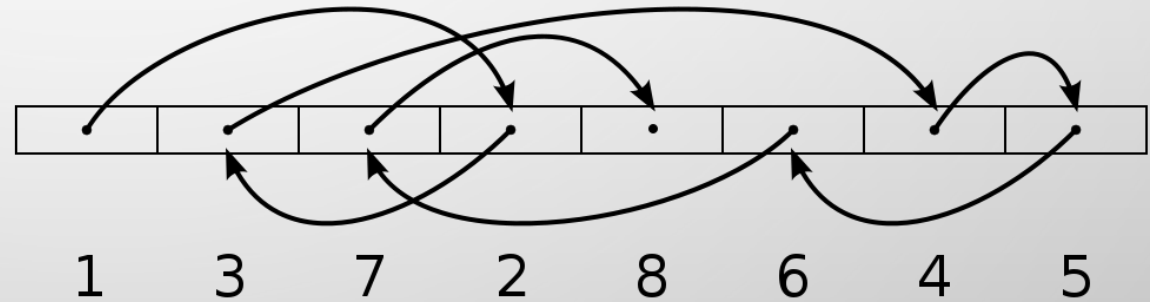
SEQUENTIAL (LEFT BRAIN)

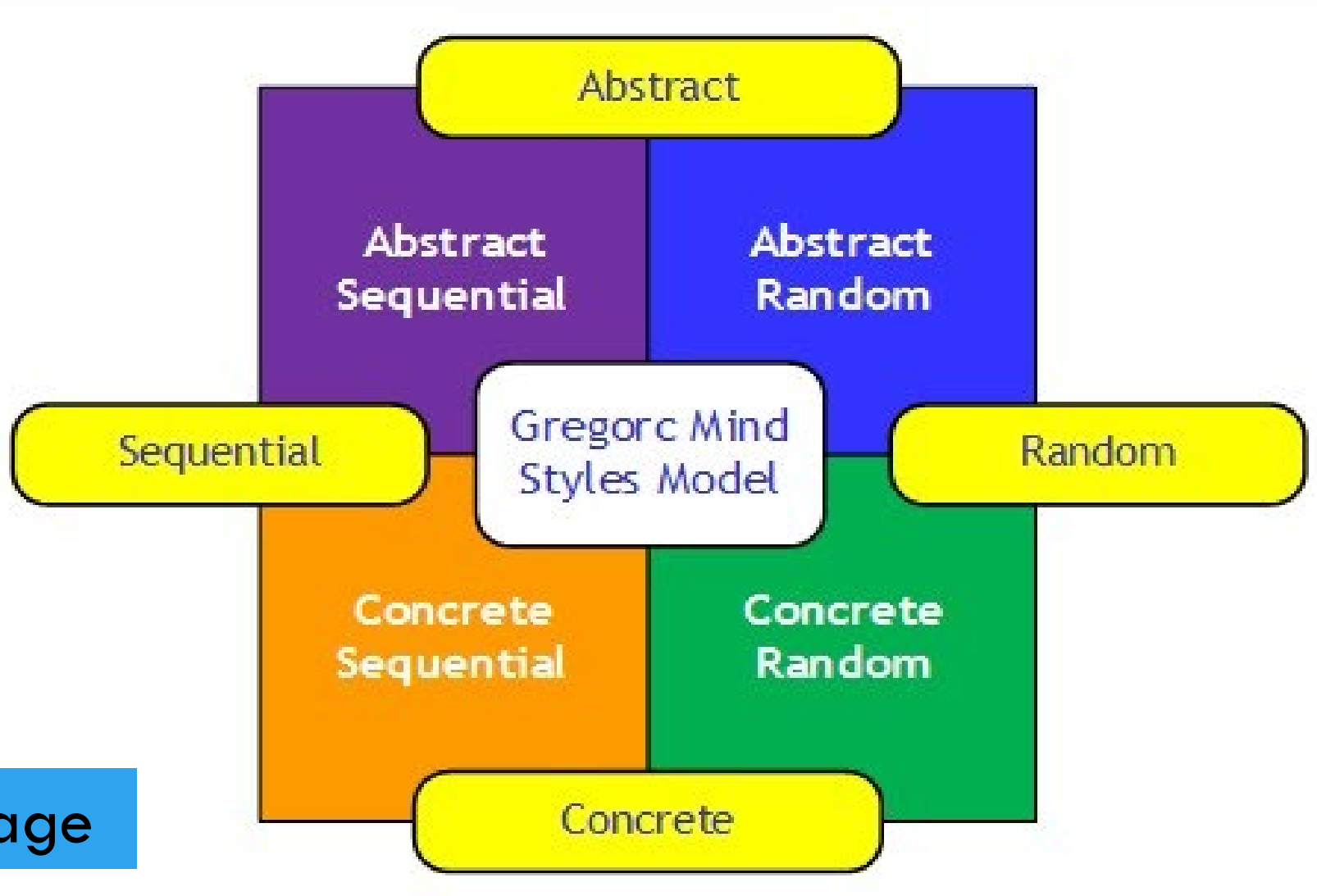
YOU PROCESSING
CHUNKS OF
INFORMATION IN A
LINEAR WAY. YOU
PREFER A PLAN OR SET
OF STEPS TO FOLLOW.

Sequential access



Random access





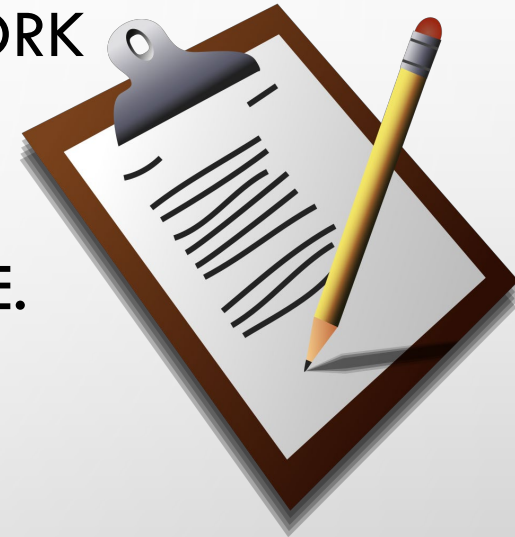
Storage

Combinations of Perceptual and Ordering Ability

- Concrete Sequential (CS)
 - Abstract Random (AR)
 - Abstract Sequential (AS)
 - Concrete Random (CR)
-
- Each individual has a unique combination of natural strengths and abilities

CONCRETE-SEQUENTIAL (LEFT – LEFT)

- PRACTICAL AND WELL ORGANIZED. THEY LIKE TO PLAN THEIR WORK AND WORK THEIR PLAN.
- THINKING PROCESSES ARE LOGICAL, INSTINCTIVE AND DELIBERATE.
- STRIVE FOR PERFECTION AND HAVE AN EYE FOR DETAIL.
- FOCUS ON MATERIAL REALITY AND PHYSICAL OBJECTS.
- CREATIVITY LIES NOT WITH ORIGINALITY BUT WITH MAKING IT MORE EFFECTIVE THAN THE ORIGINAL.
- PREFER AN ENVIRONMENT THAT IS ORDERED, PRACTICAL, QUIET, AND STABLE.



CONCRETE SEQUENTIAL (CS)

YOU WANT YOUR INFORMATION PRESENTED
SEQUENTIALLY WITH CONCRETE FACTS AND DATA.

CONCRETE SEQUENTIAL LEARNERS LEARN WELL
WHEN ONE EXAMPLE OR CONCEPT FOLLOWS
ANOTHER IN A LINEAR WAY. HOPPING AROUND IS A
PROBLEM AND CAN CREATE FRUSTRATION AND
CONFUSION.



PLANNING FOR CS PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-





CONCRETE-RANDOM (LEFT – RIGHT)

- PRACTICAL AND LIVE IN THE PHYSICAL WORLD, BUT THEY LIKE TO LEARN BY TRIAL AND ERROR. RATHER THAN A PLAN, THEY WANT OPTIONS.
- THINKING PROCESSES ARE INSTINCTIVE, INTUITIVE, AND IMPULSIVE.
- EVENTS AFFECTED BY OUTSIDE VARIABLES.
- FOCUS ON PRACTICAL APPLICATIONS, METHODS, AND PROCESSES.
- CREATIVITY IS ORIGINAL, INVENTIVE, AND UNIQUE.
- PREFER AN ENVIRONMENT THAT IS STIMULUS RICH AND COMPETITIVE.

CONCRETE RANDOM (CR)

YOU DON'T CARE WHAT SEQUENCE THE INFORMATION COMES YOUR WAY, AS LONG AS IT'S CONCRETE AND YOU CAN RELATE TO IT.

CONCRETE RANDOM LEARNERS CAN SKIP AROUND PRETTY QUICKLY, BUT THEY NEED EXAMPLES TO LATCH ON TO. THEY'RE PRETTY EFFECTIVE AT CUTTING THROUGH FOG AND FINDING WHERE THE RUBBER MEETS THE ROAD.



PLANNING FOR CR PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-



ABSTRACT-SEQUENTIAL (RIGHT-LEFT)

- LIKE TO DEVELOP IDEAS IN A LOGICAL WAY. HOW SOMEONE FEELS ABOUT SOMETHING DOES NOT CHANGE REALITY.
- THINKING PROCESSES ARE INTELLECTUAL, ANALYTICAL, CORRELATIVE, FLUID, AND QUICK.
- LOVES BOOKS.
- FOCUS ATTENTION ON KNOWLEDGE, CONCEPTS, AND IDEAS.
- CREATIVITY LIES WITHIN MODELS, THEORIES, AND SYNTHESIZING.
- PREFER AN ENVIRONMENT THAT IS ORDERED, QUIET, INDEPENDENT, AND MENTALLY STIMULATING.



ABSTRACT SEQUENTIAL (AS)

ABSTRACTIONS ARE GREAT AS LONG AS THEY FOLLOW A SEQUENTIAL FLOW. ABSTRACT SEQUENTIAL LEARNERS LIKE TAKING NOTES, OUTLINING, DOING RESEARCH, AND WRITING REPORTS. WORKING PATIENTLY AND METHODICALLY. BEING PREPARED FOR CLASS. DEBATING AND USING LOGICAL DEDUCTIONS AND RATIONAL ARGUMENTS. MAINTAINING HIGH STANDARDS, WHICH MAY LEAD THEM TO BEING CRITICAL THEIR WORK.



PLANNING FOR AS PEOPLE

PLEASE GIVE EXAMPLES

1-

2-

3-

4-

5-



ABSTRACT-RANDOM (RIGHT-RIGHT)

- WORK FROM THE HEART, NOT THE HEAD. HOW SOMEONE FEELS ABOUT IT MAKES A GREAT DEAL OF DIFFERENCE.
- THINKING PROCESSES ARE BASED IN FEELINGS, WHICH MAKES THIS TYPE OF PERSON GOOD AT ESTABLISHING A RAPPORT WITH PEOPLE.
- MAKE SENSE OF THE WORLD USING FEELINGS AND EMOTIONS.
- FOCUS ON EMOTIONAL ATTACHMENTS, RELATIONSHIPS, AND MEMORIES.
- CREATIVITY IS IMAGINATIVE AND OFTEN EXPRESSED THROUGH MUSIC AND ART.
- PREFER AN ENVIRONMENT OF EMOTIONAL EXPERIENCES, ACTIVE AND COLORFUL, AND PHYSICAL FREEDOM.



ABSTRACT RANDOM (AR)

ABSTRACTIONS ARE GREAT AND IT DOESN'T MATTER WHAT SEQUENCE. ABSTRACT RANDOM LEARNERS HAVE THE SIMPLEST TIME LEARNING BECAUSE THE SEQUENCE DOESN'T MATTER BUT CAN HAVE A HARD TIME SHARING WHAT THEY KNOW. THEY GET BORED WHEN INFORMATION IS SEQUENTIAL AND DETAILED.



PLANNING FOR AR PEOPLE

PLEASE GIVE EXAMPLES

1-

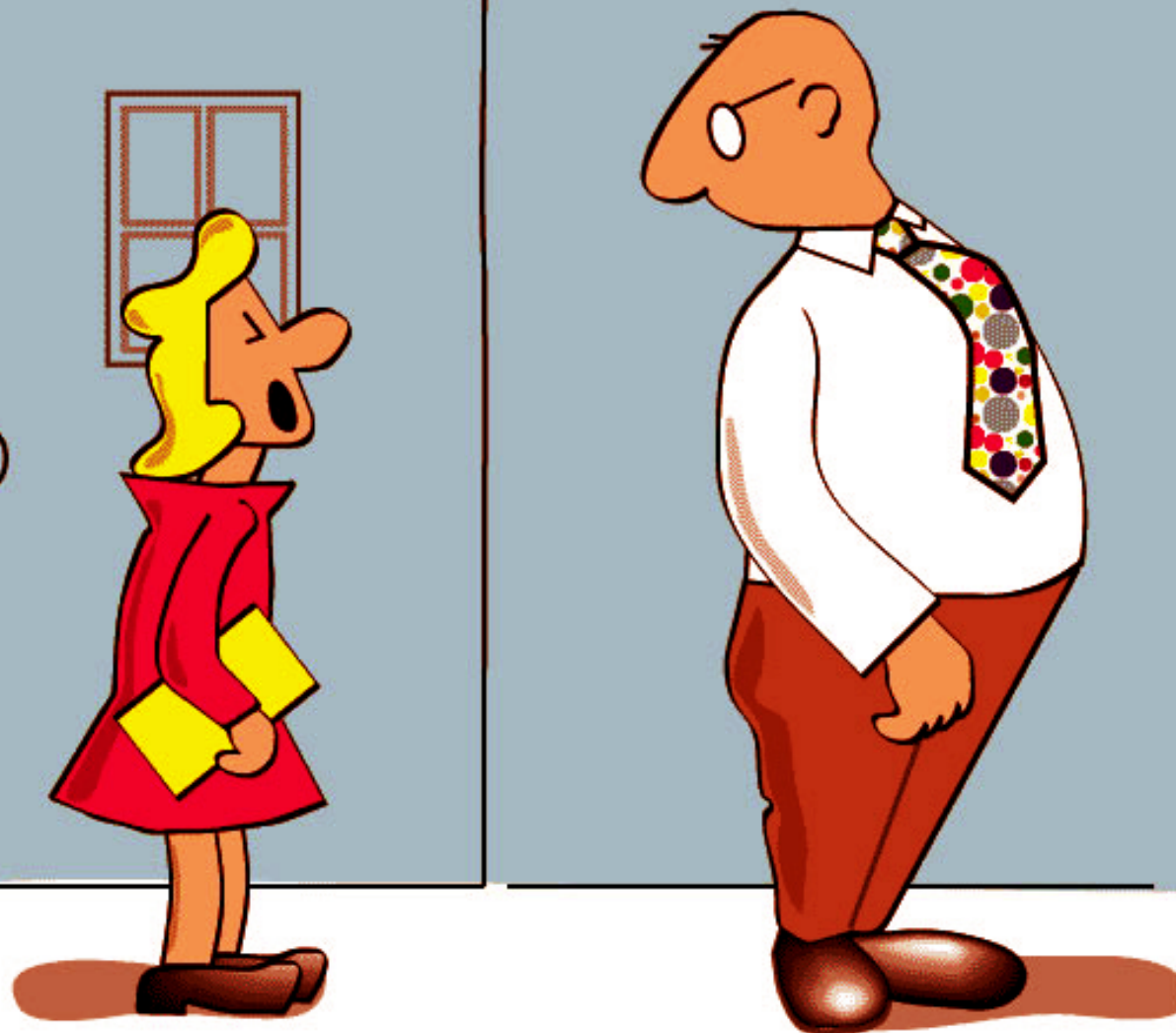
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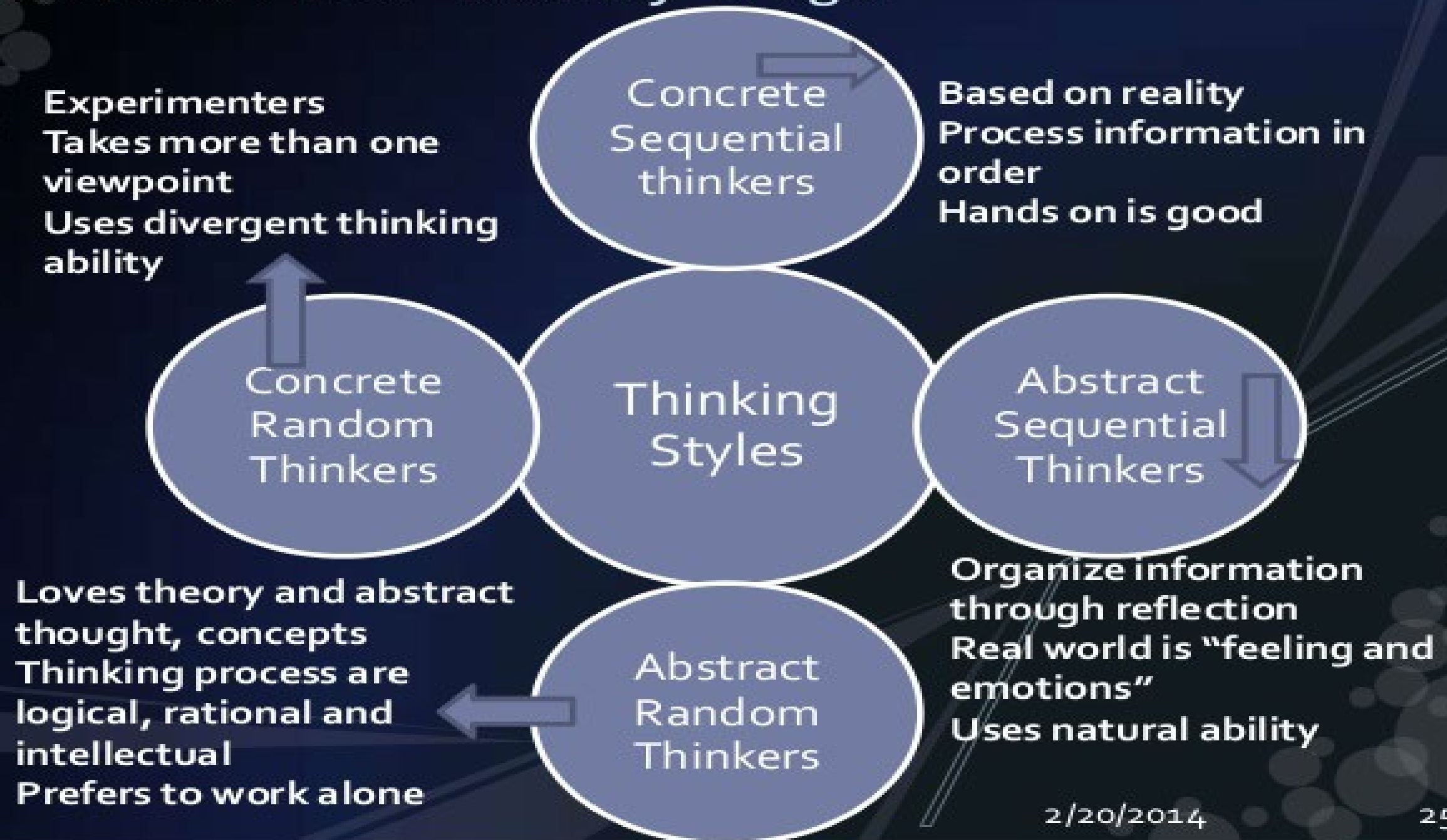
5-





"As we start a new school year, Mr. Smith,
I just want you to know that I'm an Abstract-
Sequential learner and trust that
you'll conduct yourself accordingly!"

Credits: Prof. Anthony Gregor



FORMAT - 90 MINUTES

- FALL IN (C) (S)
- GAMES (A) (R)
- HONOR / CLASS WORK (C) (A) (R)
- WORSHIP – ONE VERSE (A) (C) (R)
- FALL OUT – (R) PRAYER

(S)

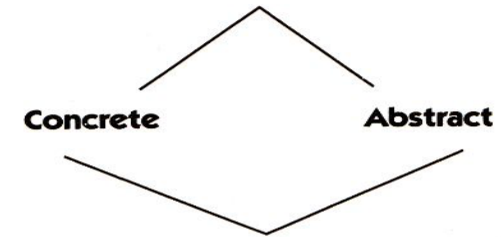


Learning Styles

The way in which we view the world is called our . . .

Perception

We perceive in two ways . . .



The way we use the information we perceive is called . . .

Ordering

We order in two ways . . .



What's Your Learning Style?



Clipboard
(concrete
sequential)



Puppy
(abstract
random)



Microscope
(abstract
sequential)



Beach Ball
(concrete
random)

Gregory & Chapman

Test Time

Test

The word "Test" is rendered in large, bold, red 3D block letters. It is surrounded by several smaller green 3D numbers, including 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0, which are scattered around the base of the letters. The entire scene is set against a white background with soft shadows.

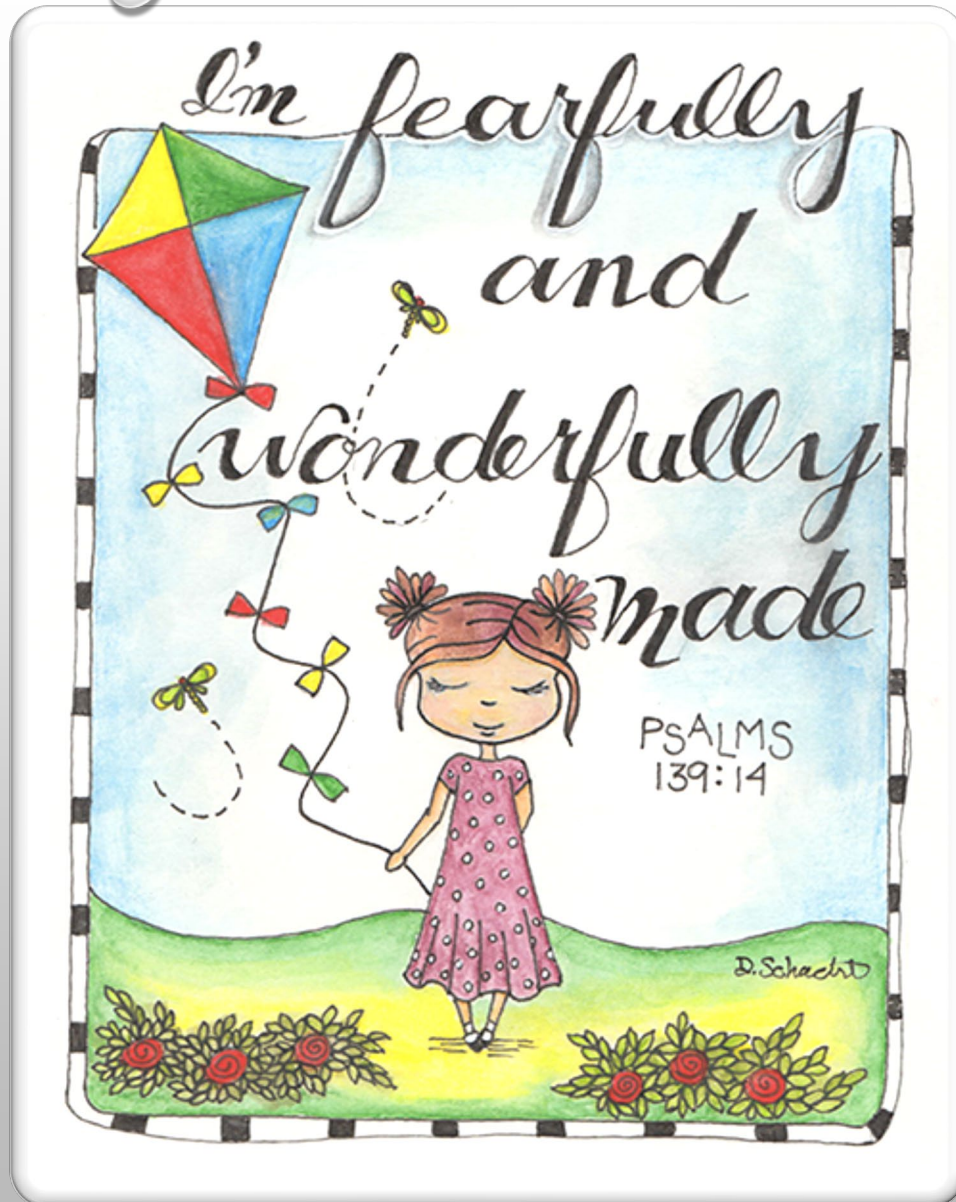
What Are Your Learning Style Preferences?

CS: concrete, sequential, linear, organized, require clear guidance and directions, prefer closure, need models and exemplars, prefer predictability and order, desire clear and practical reasons for completing an assignment, inclined to work independently, follow policy and procedure.

AS: abstract, sequential, conceptual, emphasize the big picture, whole-to-part relationships, strategic, intellectually organized but externally “pile collectors,” strategic thinkers, can be “devil’s advocates,” like to debate conflicting perspectives.

CR: concrete, random, use the here-and-now as a springboard for vision and possibility, “don’t fence me in,” “don’t tell me what to do,” enjoy independent projects that are reality-based, strong leadership traits, enjoy non-traditional education.

AR: abstract, random, tend to be feeling and relationship oriented, highly interactive and communicative, express themselves through the arts, equity-oriented, advocates for the disenfranchised, prefer group activities, not closure driven.



PSALM 139:14

**¹⁴ I PRAISE YOU BECAUSE
I AM FEARFULLY AND
WONDERFULLY MADE;
YOUR WORKS ARE
WONDERFUL,
I KNOW THAT FULL
WELL.**